



Renault Trucks D Wide CNG



renault-trucks.com



**RENAULT
TRUCKS**

Welcome on board your RENAULT TRUCKS D Wide CNG

You have now taken possession of your new vehicle.

We hope that it brings you all the satisfaction you have the right to expect from it and which was the reason for your choice.

This driver's handbook gives you the information you need to:

- become familiar with your RENAULT TRUCKS vehicle and thus take full advantage of all the technical improvements it incorporates, in the best operating conditions;
- guarantee optimum operation on a permanent basis by the simple but rigorous observation of the service advice;
- resolve minor incidents not requiring input from a specialist without losing too much time.

Renault Trucks

Siret 954 506 077 00 120 - RCS LYON B 954 536 077

The manufacturer reserves the right to make any modifications deemed necessary during production. This Driver's Handbook should therefore not be considered as a standard specification for the model in question.

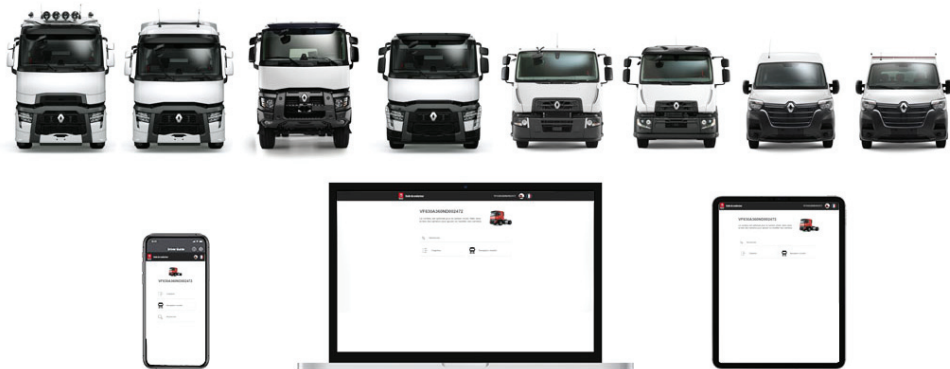
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TABLE OF CONTENTS

Foreword.....	6
Generalities.....	16
Generalities.....	16
Technical data.....	17
Locking and Alarm.....	22
Locking.....	22
Vehicle exterior.....	30
Vehicle access.....	30
Tanks.....	32
Master switch.....	37
Cab tilting.....	40
Cab tilting.....	40
Driver environment.....	46
Driving position.....	46
Instrument panel.....	64
Tachograph.....	78
Multifunction information display.....	81
Living.....	98
Comfort.....	98
Radio.....	105
Ventilation - Cab temperature management...	122
Safety.....	130
Safety.....	130
Vehicle operating instructions.....	140
Vehicle operating instructions.....	140
Driving advice.....	148
Driving advice.....	148
Daily checks.....	152
Daily checks.....	152
Start-up and driving.....	162
Before starting.....	162
Start-up.....	165
On the road.....	170
Allison gearbox.....	193
Retarder.....	208
Driving on difficult terrain.....	210
Stop.....	213
Air suspension.....	214
External equipment - control/management...	222
External equipment - control/management.....	222

Servicing and maintenance.....	228
Identification.....	228
Day-to-day maintenance.....	229
Maintenance recommendations.....	245
Maintenance operations.....	247
Cleaning.....	256
 Breakdowns - quick fixes.....	 262
Breakdowns - quick fixes.....	262

Access to the Driver Guide



To use the Driver Guide:

- Go to:
<https://driverguide.renault-trucks.com/>
- or
- scan the QR code to find the driver guide app.
- or
- search for "...Renault Trucks Driver Guide" in your app download site.



You will find all the necessary information relevant to your specific Renault Trucks vehicle.

We reserve the right to make changes to this publication in the interests of constantly improving our output. The digital version will always contain the most up-to-date information.



Foreword

Welcome on board your RENAULT TRUCKS vehicle

The few moments you spend reading this handbook will be amply repaid by what you learn from it and the new technical features you will find in it. And if some points are still unclear, our network technicians will be pleased to provide you with any further information you wish to obtain.



Although intended to reflect your vehicle configuration as closely as possible, these instructions can sometimes mention certain options that are not available on this vehicle or images that offer slightly different solutions from those presented on your vehicle.

If in any doubt, please contact the nearest Renault Trucks service point.

Reference language

Our instructions are published in French then translated into your language by professional translators. Translation errors can nevertheless slip into our lines, so, in case of doubt, the French version of the digital Driver Guide will always prevail over all the others.

Reading notes:

The references, digits or letters mentioned in the text refer to two types of illustration:

- *Digits correspond to figures or photos near the text.*
- *Letters, possibly followed by a digit, correspond to the vehicle instrument panel diagram inside this handbook.*

Happy driving at the wheel of your RENAULT TRUCKS vehicle!

RENAULT TRUCKS: a cross-border service

RENAULT TRUCKS 24/7 has already been working in Europe for several years.

There are 19 emergency call centres ready to take your calls 365 days a year.

Spare parts homologated by RENAULT TRUCKS meet the requirements of the technical specification and comply with regulations. Only they can bring you:

- the safety of perfect conformity,
- the manufacturer's warranty,
- maintenance of the original specifications and performance.

General operating instructions for commercial vehicles

Depending on your vehicle's equipment

Whether you are a professional driver, a haulier driving your own vehicle or a haulier entrusting the vehicle to one of your company employees, it is essential to follow and ensure the application of the following instructions; they are only a reminder of the basics of the trade and standard professional practice and are in no way to be taken as

exhaustive. In this way you will obtain the maximum benefit from your vehicle and prevent any risk of accidents or incidents.

1. Some basic instructions

- The driver must hold all the necessary licences and should drive only when physically fit and sufficiently rested.
- The vehicle must comply with the regulations in the country or countries in which it is used.
- Any dangerous goods indicator panels must be present and in good condition.
- Loads:
 - total or per-axle weights (regulatory or technical) must not be exceeded,
 - loading and securing of loads must be carried out using conventional procedures. Tarpaulins and side curtains must be correctly stretched and fastened, and doors and sideboards locked, etc.
- In the cab:
 - never carry dangerous products (petrol, trichlorethylene, thinners, etc.),
 - if an animal is carried, it must be kept away from the driving position.
- Access and descent:
 - use the steps and handles provided for this purpose. Never jump out of the vehicle. When descending, watch out for the traffic flow, particularly after a long period of driving,
 - extra care should be taken when weather conditions are bad (rain, snow, ice) or when it is dark.



- **USE IN CLOSED PREMISES:**
 - **NEVER LEAVE THE ENGINE RUNNING IN CLOSED AND/OR POORLY VENTILATED PREMISES. THE EXHAUST GASES CONTAIN HIGHLY TOXIC COMPONENTS. IN CONCENTRATION THEY CAN HAVE VERY SERIOUS EFFECTS ON YOUR HEALTH.**

2. Before getting into the vehicle, check:

- the general condition of your vehicle, visually (as per handbook),
- tyre condition, tyre pressures (including spare wheel), and the absence of any foreign body between the twin wheels,
- cleanliness of windows, windscreen, rear view mirrors, headlights and other lights, number plates,
- operation of regulatory and optional lighting systems,
- presence and contents of the on-board tool kit,
- in winter, the presence of snow chains and that they are securely fastened.
- that vehicles equipped with side guard panels and beams are permanently provided with this equipment. When removing/refitting, ensure that the locks are correctly locked and tighten the screws moderately.

3. On board

- Check the condition of the non-slip foot pedal covers.
- Ensure that the safety controls (steering wheel, foot pedals, gear lever, etc.) are never cleaned with a slippery product (such as silicone).
- Adjust your driving position,
 - steering wheel: ensure the steering column is locked,
 - seat: ensure it is correctly locked in place,
 - rear view mirrors,
 - seat belt: it is mandatory to wear this; use it,
 - child(ren) on board: comply with the legislation in force.
- Before starting, check:
 - that the gear selector lever is in the Neutral position
- Check that all instrument panel indications are normal (if in doubt, refer to this driver's handbook).

Digital tachograph

- Check that the driver's card is in tachograph slot 1.
For a second driver, check that his card is in tachograph slot 2.
Check that the tachograph is working properly.

4. When on the road

- If you notice anything abnormal in the vehicle's operation, stop and find the reason. Do not set off again unless you are certain that it represents no serious technical or safety-related threat.
- When driving, the use of some of the standard, optional or added equipment is strictly forbidden (hand-operated sun-roof or hatch, television, on-board telephone, CB, etc.) or is permitted only if you take all the precautions necessary for road safety (cigar lighter, radio manual search function, etc.).

- Adapt your driving style to suit your load (banking or bend, high centre of gravity, etc.), taking account of weather conditions and the time of day.
If necessary, adjust the headlight beam levels.
- Never shut down the engine when the vehicle is moving (this will cut off the power steering and could reduce braking effectiveness).

5. When parking the vehicle

- Check that the vehicle is correctly parked (so that it does not obstruct traffic flow or threaten the safety of neighbouring installations).
- If the vehicle is going to remain stationary for some time, use one or more wheel chocks to prevent it from moving (semi-trailer compressed air leakage, black ice, etc.).
- Check that:
 - the parking brake is locked and holds the complete vehicle still (test position),
 - the gear selector lever is in the Neutral position,
 - the battery disconnect switch is switched off, depending on vehicle equipment,
- Do not leave in the cab:
 - important documents (personal documents, vehicle documents, documents related to the load),
 - unattended animals.

6. Moving away uphill

- To prevent the vehicle from rolling backwards when moving away on hills, it is recommended to apply the parking brake.

7. When repairing or servicing the vehicle



Prior to carrying out any work on the electronic air suspension (other than calibration), place axle stands under the chassis.

- Check the tightness of the wheel nuts according to recommendations.
- Before tilting the cab:
 - ensure that there is enough space at the front of the vehicle,
 - ensure that the parking brake is applied,
 - cordon off a safety perimeter around the cab and ensure that nobody enters this or parks inside it during cab tilt manoeuvres, or while the cab is tilted,
 - stop the engine,
 - put the gear selector lever in the Neutral position,
 - ensure that nothing will fall on the windscreen,
 - close the doors,
 - fully tilt the bull-bar if fitted on the vehicle,
 - open the bonnet/the radiator grille,

-
- tilt the cab completely. If partly tilted, chock in place.
 - With the engine running:
 - do not go near any moving parts (fan, drive belts, etc.),
 - never disconnect the electrical power (stop the engine first).
 - Diesel fuel is flammable: if the fuel filler cap is open, do not smoke, avoid naked flames, and do not use your mobile phone in the vicinity.
 - Batteries are filled with acids (risk of serious injury); handle them with care.
 - If using an external starting aid:
 - use suitable cables,
 - respect polarities.
 - When changing a fuse, replace it with another fuse of the same rating.
 - Additional power lines should only be installed by specialists.
 - The installation of additional air lines requires a technical study carried out or approved by the manufacturer.
 - It is strictly forbidden to heat polyamide hoses (brake circuit pipes).
 - Raising the vehicle with a jack: chock the wheels prior to jacking.
 - Immobilising the vehicle: use one or more wheel chocks as necessary.
 - Wheels and tyres:
 - never check the pressure or inflate/deflate a tyre when hot,
 - never face the wheel when checking the pressure or inflating,
 - when fitting, it is particularly important to ensure that wheels fitted with rim clamps are centred (on Trilex wheels, position the rim clamp at the join of the segments),
 - Roadside repairs: collect all fluids that have been drained (oil, fuel, coolant, etc.).
 - To help protect the environment, comply with the legislation in force (recovery of oil, anti-freeze and cartridges).

When draining oil (engine, gearbox, drive axles), there is a risk of burns (hot oil).

When draining coolant, there is a risk of burns (hot fluid).

- If anti-skid chains are used, the rear wings should be removed, road speed should be reduced and chain tension should be tested at regular intervals.

Any modification, especially to circuits (electrical, electronic or compressed air), can have serious consequences. Such work should only be undertaken with the agreement of the manufacturer. RENAULT TRUCKS declines any responsibility in the event of a non-compliant assembly.

Only genuine RENAULT TRUCKS parts and circuits defined by the manufacturer guarantee quality, safety and reliability.

By observing the above instructions, you will be using your vehicle in the best possible way. However, you must also carefully read the driving handbook and consult the RENAULT TRUCKS network whenever you need any further information.

We remind you that application of the contractual warranty by RENAULT TRUCKS is subject, among other things, to proof by the customer that servicing and maintenance of the vehicle have been carried out according to our recommendations (frequency, operations to be performed, quality of expendable and consumable products guaranteed by genuine certified or recommended spare parts, quality and training of repair mechanics and use of specific tools, etc.). Compliance with these recommendations will also guarantee the long-term reliability of the vehicle.

Servicing and maintenance performed by the RENAULT TRUCKS network will guarantee compliance with these recommendations. If these operations are performed outside our network, the customer must provide formal proof that our recommendations have been observed.

For all maintenance operations, consult a RENAULT TRUCKS garage.

Privacy notice for vehicle data

When you drive a product build by our company, some of the data generated by the vehicle (fuel consumption, road profile, vehicle use profile) could be processed. Such data may include personal data and are processed to develop and offer innovative products and services. We would like you to be fully informed about how we may process that information, as well as your rights. We shall always be transparent about what data are collected, how they are utilized, with whom they are shared, and whom to contact in case of any concerns. Renault Trucks policies are compliant with regulation about personal data protection.

If you would like to know more about Renault Trucks personal data protection policy, please visit the web site – <https://www.renault-trucks.co.uk>

Open Source Software

Your Renault Trucks vehicle contains various software programs. Some of those programs are open source software, which among other things means that you may have the right to gain access to the source code. This depends on the license terms for the respective software, as agreed between Renault Trucks with its affiliated companies and the respective licensors.

For further information about Renault Trucks' use of open source software and about where you can get access to the relevant source code, as well as the applicable copyright notices and developer credits, license terms and legal disclaimers, please visit <https://corporate.renault-trucks.com/en/opensource/>.

Statements of Compliance

Radio-electronic equipment in the vehicle

The following statement applies to all radio-controlled vehicle components, information systems and communication devices integrated into the vehicle:

vehicle components operated by low and radio frequencies that are standard on the RENAULT TRUCKS range comply with the essential requirements and other corresponding paragraphs of the **RED 2014/53/EU**.

The vehicle's radio equipment is CE marked and follows the following radio frequency settings:

- 7777 (key remote control): frequency 433.92MHz; output power: 14dBm.
- 1048 (Keyless lock remote control): frequency 433.92MHz (receiver only).

Declaration of simplified compliance for the radio

Aptiv Services Deutschland GmbH, 42367 Wuppertal, declares that the radio equipment linked to this vehicle works according to Directive 2014/53/EU.

The complete compliance declaration text is available at the following internet address:
[https:// www.aptiv.com/automotive-homologation](https://www.aptiv.com/automotive-homologation)

Certification of the radio

Frequency bands and output power levels		
Application	Frequency	Maximum power output
AM	153-279 kHz, 522-1611 kHz	-
FM	87.5-108 MHz	-
DAB	174.928-239.200 MHz	-
Bluetooth	2402-2480 MHz	9.5 dBm (9 mW)

Electromagnetic compatibility

The electromagnetic compatibility of the vehicle's components has been tested and approved in compliance with the **ECE-R 10** currently in effect.

Warnings

In this document, the safety instructions are represented as follows:



SAFETY POINT REQUIRING SYSTEMATIC INSPECTION BEFORE PUTTING THE VEHICLE BACK ON THE ROAD. FAILURE TO COMPLY WITH THE PROCEDURE DESCRIBED RISKS CAUSING SERIOUS INJURY OR EVEN DEATH.



Draws attention to special and important points, procedures or regulations in force that must be complied with.

***WARNING!** Any different or inappropriate working method risks causing bodily injury to persons and/or damage to products.*



***NOTE!** Draws attention to particular or important points of the method.*



Generalities

Generalities

Your vehicle uses Natural Gas as fuel.

Natural gas is a safe fuel with a self-ignition temperature of 540°C, compared with 220°C for diesel and 250°C for petrol.

Natural gas is a gaseous hydrocarbon extracted from deposits in the same way as crude oil. Its main component is methane, associated with variable proportions of ethane, propane, butane and nitrogen, depending on where it was extracted. As it contains no toxic components, emissions and post-combustion treatment in the engine are reduced. The smoke visible at the vehicle exhaust is condensed water vapour.

At normal temperatures, even under high pressure, this fuel remains gaseous. It is distributed by the domestic network under low pressure.

To achieve optimum performance from the vehicle, it is recommended that it be used in a temperature range between -25°C and +40°C and at an altitude of less than 3000 m.

For automotive use, in order to obtain sufficient range, this natural gas is compressed by the refuelling station before transfer to the tanks of the vehicle. The unit of pressure measurement is the bar.

Unlike fluids, which change little in volume when pressure varies, gases are likely to occupy very different volumes depending on the pressure to which they are subjected.

A tank with a nominal capacity of 100 litres (capacity for a fluid) could hold 200 litres of gas at pressure of 2 bar, 10,000 litres at 100 bar or 20,000 litres at 200 bar.

The pressure of a quantity of gas in a given volume can also vary with temperature. Generally, refuelling stations take ambient temperature into account when refilling tanks.

The pressure required for storage, must be reduced to supply the engine. This is the role of the main reducing valve which reduces the pressure to about 7.5 bar.

For greater accuracy, another pressure reducing valve integral to the engine further reduces the pressure of the gas. The mixer, controlled by a control unit, supplies the engine and modulates its speed according to user needs by optimising the combustion parameters.

The pressure-reducing valve on the chassis is connected to the engine coolant system to heat the gas whose temperature drops during expansion.

When filling, the appearance of frost on the pipes is normal.

The tank manual shut-off valves should always be kept open during the vehicle operating and parking times. They should be only be opened or closed during use or for maintenance reasons.

Technical data

The features of a CNG vehicle differ greatly from a conventional diesel vehicle. This will be clear as soon as you turn the key in the ignition. The pages below list the main technical features of your vehicle. For all further questions, please contact your Renault Trucks service point.

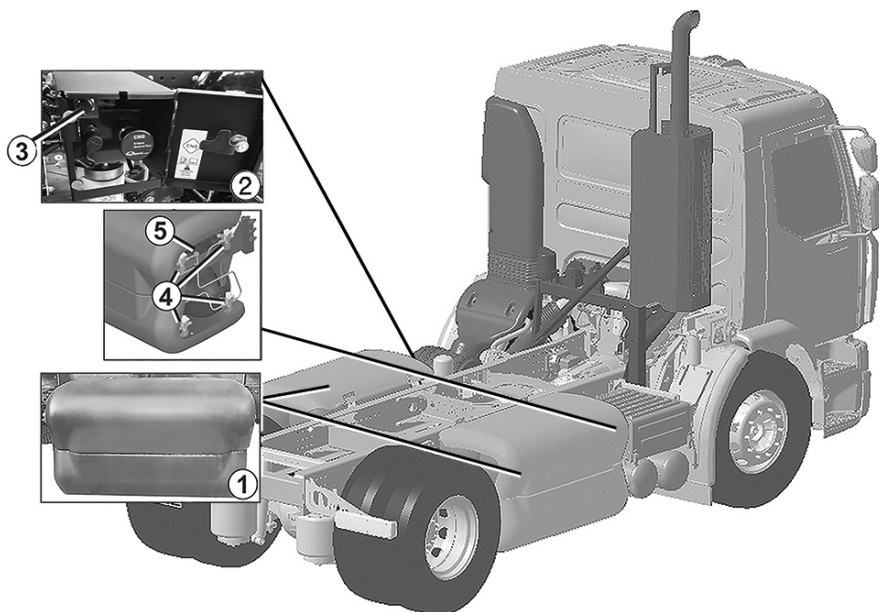
CNG engine

Number of strokes:	4 stroke
Number of cylinders and layout:	Six cylinders in-line
Fuel used:	Compressed Natural Gas
Starter/alternator:	24 V
Engine control unit/Ignition:	12 V
Interference suppressor:	Yes
Engine cooling:	Liquid
Exhaust silencer:	Catalytic converter
Capacity (cm ³):	8880
Compression ratio:	12.0:1
Maximum power output (kW EC):	239
Maximum power output speed (rpm):	2000
Maximum torque (Nm):	1356
Red zone:	2300 rpm

Automatic gearbox

Type:	S3200
Number of forward gears:	6
Number of reverse gears:	1

Vehicle overview



- 1 - Natural gas tanks
- 2 - Filler unit
- 3 - Flap closing sensor
- 4 - Shut-off valves
- 5 - Shock detector

Standard equipment

- Fast idling control.
- Gas refuelling port (NGV1).

Optional equipment

- Extreme cold engine protection (-15°C/- 25°C).
- Dual port NGV1 (slow refuelling) and NGV2 (rapid refuelling) for gas refuelling.
- Right-hand side gas filler opening.
- A second speed limitation (30 km/h) is available for refuse collector applications, in accordance with French standard NF 1501.
- Racks of 2x3 tanks.
- Racks of 2x4 tanks.
- Racks of 3x4 tanks.
- Racks of 4x4 tanks.



Locking and Alarm

Locking

Your vehicle is fitted with a central locking system. From the driver's side lock, you can lock or unlock the driver's and passenger's doors at the same time, or you may prefer to manage the locking system using the buttons on the remote control.

Keys

Write down here your remote control and key codes:

- **Ignition:**
- **Doors:**
- **Remote control:**

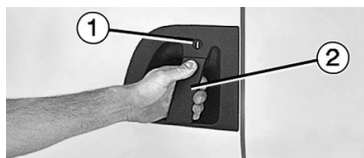
These numbers are essential for ordering a replacement set of keys in the event that your keys are lost, stolen or broken.

Doors

Opening from the outside

Unlocking using a key in the lock (1).

Pull handle (2) upwards and pull the door.



Opening the door actuates the foot board lighting and the overhead light.

Closing

Push the door until it engages automatically.

Lock using a key in lock (1).

Opening from the inside

Unlocking:

Pull handle (3) upwards and push the door.

Press remote control button (6).

Press dashboard switch to unlock the two doors.





When the door is open, handle (3) tilted downwards, the door unlocks automatically on closing.

Closing:

Pull the door until it engages.

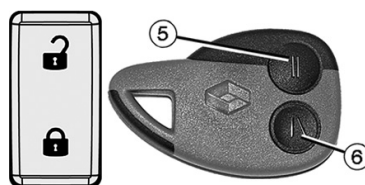
Locking:

With the door closed, tilt handle (3) downwards.

Central locking from the inside:

Central locking is done:

- manually, by tilting handle (3) downwards,
- via the remote control, by pressing button (5),
- via the switch on the dashboard.



When the doors are locked, press and hold switch for more than 5 seconds to switch from mode to unsynchronized mode and vice versa.

Synchronized mode:

- Simultaneous opening of doors by pressing remote control button (6) once.

Unsynchronized mode:

- Opening of the door on the driver's side by pressing remote control button (6) once.
- Opening of the door on the passenger side by pressing remote control button (6) a second time.

Simultaneous closing of doors by pressing remote control button (5) once.

Unsynchronized mode

Opening with the key:

- turn the key once to unlock the driver or passenger door,
- turn the key twice in less than 3 seconds to unlock both doors.

Simultaneous closing of doors by turning the key once.

With the remote control

When pressing locking button (5), the steering indicator tell-tale and the hazard warning lights tell-tale flash four times.

When pressing unlocking button (6), they flash once.



Radio frequency door remote control

This device performs the same functions as the door keys. The doors can be locked or unlocked either by the keys or the remote control.

Use

The remote control is battery-powered (CR 2032-3V) which should be replaced when the remote control range is reduced.



When the door is open, central locking is neutralised.

Unlocking the doors and powering up the vehicle

Press button (6). This action, indicated by lighting of the direction indicators, activates:

- the powering up of the vehicle,
- the deactivation of the engine immobilizer,
- the unlocking of the doors.

Locking the doors only

Press button (5). This action, indicated by direction indicators lighting four times, activates door closing. The vehicle remains powered and the engine immobilizer is deactivated.

Powering down the vehicle

Pressing button (5) a second time less than 10 minutes after the first press, indicated by a long flash of 1.5 seconds, causes:

- switching on the general switch.



If the direction indicators flash up more than four times (after replacing the batteries, for example), during the flashing, press one of the buttons twice to reactivate the remote control.

If, during a locking command, the flashing lights do not illuminate (despite them operating normally), this means:

- *that at least one of the doors is not closed properly,*
- *that there is a door locking actuator fault,*
- *that there is a receiver fault.*

Interior and foot board lighting

The vehicle is equipped with two overhead lights and two lamps for the foot board lighting.

The illumination of these lamps is linked to the opening and closing of the doors, the locking and unlocking of the vehicle and finally to the position of the key in the ignition switch.

- When unlocking the doors via the remote control, the lamps illuminate for a period of 17 seconds.
- When opening a door, the lamps illuminate or stay illuminated, if they were already lit, for a period of 5 minutes (if at least one door remains open beyond this limit).
- After closing a door, the lamps remain illuminated for 17 seconds, the time required to position the key in the ignition.
- Switching on the ignition extinguishes the lamps immediately.
- Stopping the engine activates illumination of the lamps for a period of 17 seconds.
- Locking the doors causes the lamps to be extinguished immediately.

The illumination or extinguishing of the overhead lights can be forced by their respective switches.

See **Comfort** section.

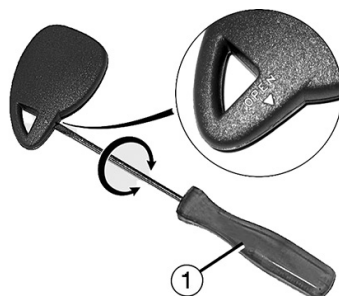
Replacing the battery

Using a flat screwdriver (1), open the casing at the place marked.

Replace battery (2) respecting the polarity marked on the cover.

Use an alkaline-type battery: **CR 2032-3V**.

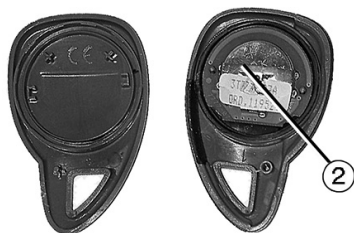
The battery life is approximately 3 years.





Risk of explosion if the battery is replaced by an incorrect type of battery or if the polarity is not respected.

Dispose of the used battery in a site intended for this purpose.



Do not forget to record your key code. If lost, or if you require another set of keys or remote controls, please contact a RENAULT TRUCKS garage. Provide them with the key codes and vehicle paperwork.



Vehicle exterior

Vehicle access

How you access the vehicle is important to ensure your safety.

Whether you are accessing your driving position, equipment, or windshield, always apply these simple rules:

- When getting in or out, always face the vehicle.
- One hand, two feet... One foot, two hands... Always keep at least three supports on the vehicle.
- Watch where you put your feet and hands.
- Take the time to secure a support before putting your weight on it. Surfaces can be slippery!

Cab access

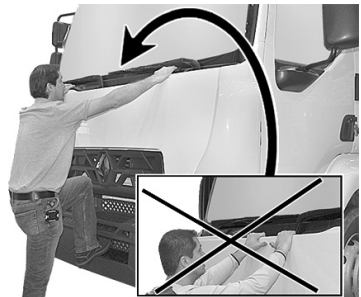
- **Up**
Use all the steps and grab handles provided for this purpose.
- **Down**
Use all the steps and grab handles provided for this purpose.



Never jump out of the vehicle.

Windscreen access

With the radiator grille shut and the windscreen wiper control in the "OFF" position, use the foot board and the grab handles to access the windscreen.



Front access

Raising your vehicle's radiator grille will give you access to important parts, such as the wiper linkage or the expansion tank.

Radiator grille

Pull on the lower section of the radiator grille to open it. Push it back to close it.



WHEN WORKING ON THE FRONT END OF THE VEHICLE, WITH THE RADIATOR GRILLE OPEN, ENSURE THAT THE WINDSCREEN WIPER CONTROL IS IN THE OFF POSITION. INDEED, IT MAY BE DANGEROUS TO PLACE YOUR HANDS ON THE WINDSCREEN WIPER LINKAGES. IF POSSIBLE, SWITCH OFF THE MASTER SWITCH.



Gas tank refuelling

Precaution for gas refuelling

The vehicle has several high-pressure tanks.

Refuelling can only take place when the vehicle is stationary with the engine stopped.

Check that the manual tank valves are in the open position.

During distribution, the gas may be contaminated by impurities, oil, dust, sand, metal, etc.

It is essential to use gas free from all these impurities. Check the refuelling connection and keep it clean.

A warning light illuminates if the safety flap is not shut when the ignition is switched on.

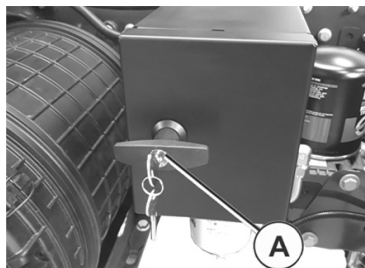


Follow the safety instructions posted in the refuelling stations.

Gas refuelling

The manoeuvres below should be carried out with caution: no smoking or using mobile phones. All the tank valve taps should be open.

A housing protects the coupler. Filler flap (A) of the box opens and closes manually with the help of a special key.



- 1- Switch off the ignition, switch off the lights.
- 2- Check that there is no sign of gas leakage in the system or in the filling station.
- 3- Check that the filling station CNG supply pressure is 200 bar.
- 4- Open the filler flap (A).
- 5 - Check to make sure that the station fitting and vehicle coupler are clean.
- 6- Fill in accordance with the instructions of the individual station (max. P = 200 bar at constant temperature).
- 7- Before refitting the protective cap on the coupler (C), clean it carefully
- 8- Close the filler flap (A).



The condition of the seal and the refuelling coupling protective cover should be checked at each use. In the event of a fault, they should be replaced immediately at a RENAULT TRUCKS service point.

Compressed natural gas refuelling stations are fitted with an automatic stop that stops the gas flow when the tanks have been filled to their nominal pressure.

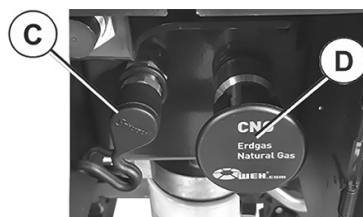
The pressure in the tanks increases with temperature, so the filling station uses a pressure compensation system that takes into account the ambient temperature at the time of refuelling. The tank filling time depends on individual refuelling station technology.

There are two types of refuelling:

- Standard refuelling using one port, performed with port NGV1 (C)



- Standard and fast refuelling using two ports, performed with ports NGV1 (C) and NGV2 (D)



Reserve and range

The indicator (1) shows the fuel level. When the gauge reaches the low level, the reserve indicator (2) illuminates.



The fuel gauge on the instrument panel indicates a pressure and not a volume. Pressure will show maximum (200 bars) even if only one tank is open. You are reminded that the tank manual shut-off valves should always be kept open during the vehicle operating and

parking times. They should be only be opened or closed during use or for maintenance reasons.

The fuel reserve light illuminates on the instrument panel for a pressure below 30 bar. The smooth operation of the engine is not guaranteed for pressures below 20 bar in the tanks.

Gauge stabilisation can take a few seconds. It is important to remember the stabilised fuel level information.

Fuel labels

Modern engines are very sensitive to the quality of the fuel used. To guarantee optimum operation and the best possible cleaning of exhaust gases, the legislators have decided to impose a clear and precise code on fuel manufacturers and distributors, details are given in this chapter.

Label read mode

Fuel compatibility labels



Before filling your vehicle with fuel, please refer to the label affixed to the vehicle fuel tank(s). This label indicates which types of fuel are compatible with your vehicle.

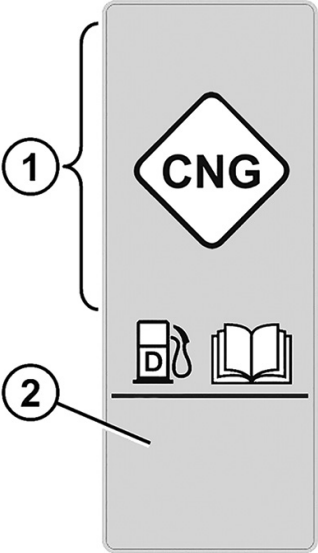
On your vehicle fuel tank(s), a label like the one shown below indicates which types of fuel are compatible with your vehicle, based on the certificate level of your vehicle.

The logos (1) represented on the label are the logos that you will find on the fuel pumps at a service station.

Please refer to the table for more details about the meaning of each logo.







The note (2) provides additional information about the grade of fuel if relevant.



Meaning of the logos shown on the labels

The table below gives the meaning of each of the current logos.

LOGO	Relevant standard	Indicates that your vehicle is compatible with
B7	EN-590	Fuels that contain up to 7% Bio-diesel (Standard diesel in Europe)
B10	EN-16734	Fuels that contain up to 10% Bio-diesel
B20	EN-16709	Fuels that contain from 14 to 20% Bio-diesel

	EN-16709	Fuels that contain from 24 to 30% Bio-diesel
	EN-14214	Fuels that contain up to 100% Bio-diesel (See Caution* below)
	EN-15940	Paraffinic fuels obtained by synthesis or hydro-treatment (example: HVO, GTL, etc.)
	CNG	Compressed Natural Gas. (Compressed Natural Gas)

Master switch



When the electrical circuit is open, the air conditioning systems are no longer operational.

Turn the handle (1) a quarter turn to isolate the electrical installation except:

- the central door locking
- the tachograph
- the hazard warning lights



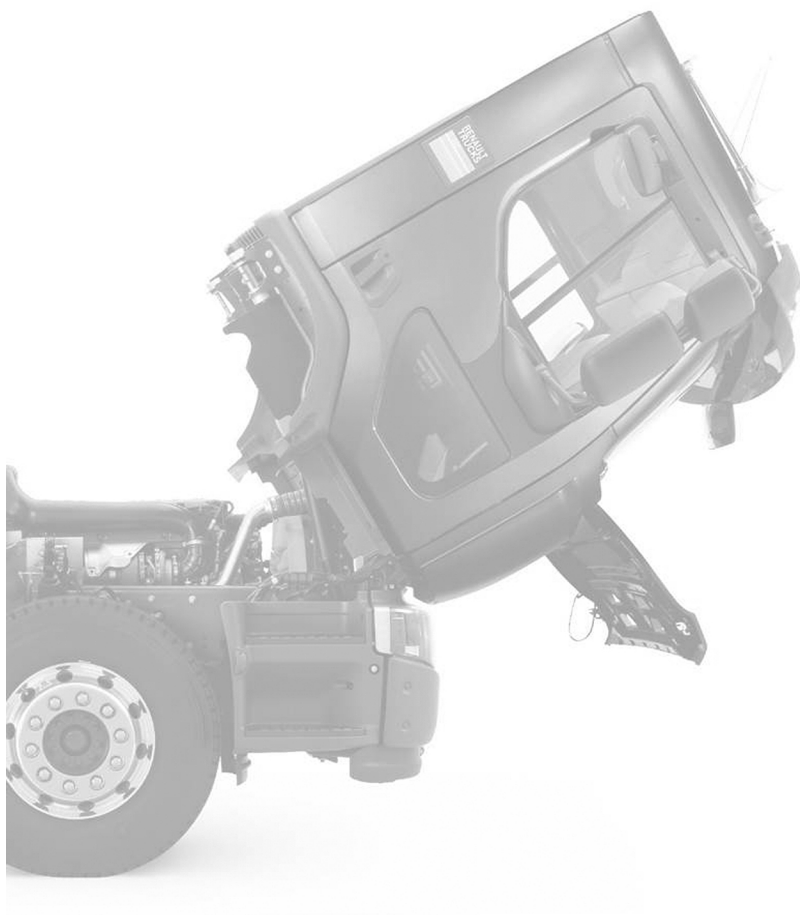
Wait for 10 seconds after switching off the ignition before opening the master switch.



*If the vehicle is equipped with an electric door locking remote control with master switch control, refer to the **Locking and alarm** section for details of how to use it.*



Wait for 10 seconds after switching off the ignition before opening the master switch.



Cab tilting

General information on the cab tilting



Never tilt the cab while the engine is running.

Before tilting the cab, check that:

- the ignition is switched off,
- the parking brake is applied,
- the gear shift control is in the "N" (Neutral) position,
- the storage compartments are locked,
- no object inside the cab could be thrown towards the windscreen,
- the doors are fully locked,
- the area in front of the vehicle is unobstructed.

When working underneath the cab (on the engine, etc.), the cab must be fully tilted. Do not stand directly in front of the cab when it is tilted.

Any operation on the cab tilt hydraulic circuit requires the application of safety instructions and must therefore be carried out at a RENAULT TRUCKS service point.

The service cover **must** be opened before the cab is tilted in order to avoid damage.



The doors should either be fully open or properly closed.

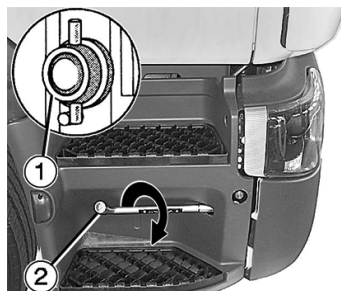
Cab tilting

Tilt the cab

Open the radiator grille.

Position lever (1) in the "Up" position. Use the control bar (2).

Unlocking is automatic, pump until the cab is tilted completely.



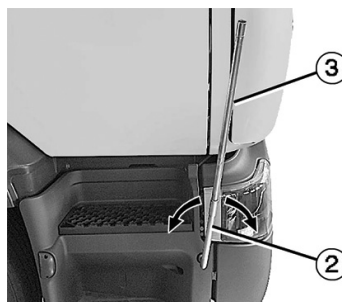
Use jack handle (3) in addition to control bar (2). Insert the jack handle fully.

Lowering the cab

Use control bar (2) and set lever (1) to "Lower" to lower the cab back into the driving position.

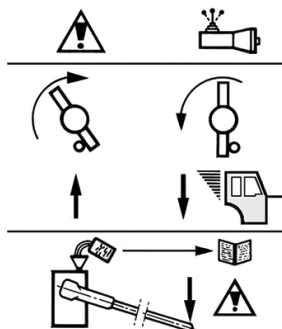
Pump until the cab locks automatically and the pump handle becomes harder to move.

Close the radiator grille.



In the event of difficulty with tilting, put the cab in the "road" position and check the oil level. Top up the level if necessary.

*Refer to the **Cab tilt hydraulic tilt** section.*



Never put oil in the hydraulic system when the cab is tilted.

Cab tilt hydraulic circuit

Cab tilt hydraulic circuit

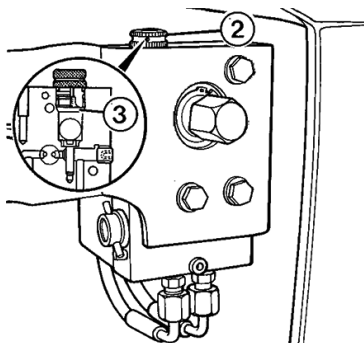
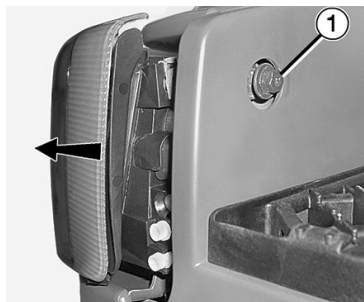
Filler and level

With the cab in the "road" position, fill with oil through oil reservoir filler port (2).

To access the tank, loosen screw (1) and rotate the headlamp insert.

Check the oil level: the oil should be flush with the top of piston (3) when the piston is in the "down" position.

Carefully complete a full tilt manoeuvre (raise and lower) and check the level again. In the event of incorrect operation, visit a RENAULT TRUCKS garage.





Driver environment

Seats

Your Renault Trucks vehicle seats can be adjusted to adapt to your body shape and ensure your comfort.



For safety reasons, it is essential to remove the plastic protective film when commissioning the vehicle.

Pneumatically-controlled seats

The controls are operational when there is sufficient air pressure.

Driver and passenger seats



Depending on the seat configuration (driver's, passenger, left-hand drive, right-hand drive), the controls are located on one side or the other of the seat. The type of seat shown is only one solution.



FOR SAFETY REASONS, ALL SEAT ADJUSTMENTS MUST BE MADE WITH THE VEHICLE STATIONARY.

THE USE OF THE SEATS IN A POSITION OTHER THAN BACK REST UP WHILE THE VEHICLE IS BEING DRIVEN IS THE RESPONSIBILITY OF THE USER.

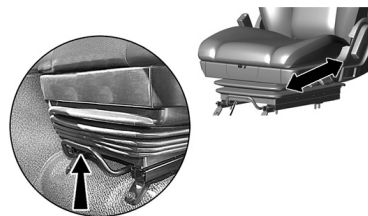
Backrest tilt adjustment (driver/passenger)

Backrest tilt adjustment and rest position lever (it is forbidden to use this position for driving).



Seat adjustments

Longitudinal seat adjustment (driver/passenger).



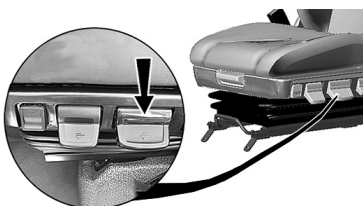
Driver's seat base depth adjustment.



Seat tilt adjustment (driver/passenger).



Seat height adjustment (driver/passenger).



Vertical suspension settings

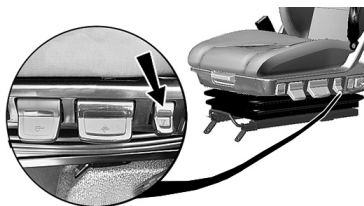
Driving position

Adjust the flexibility of the suspension depending on the condition of the road and the weight of the user.

Softness adjustment of the 'vertical' driver's seat suspension.

At top: suspension firm.

At bottom: suspension soft.



Quick lowering of the suspension (driver's seat)

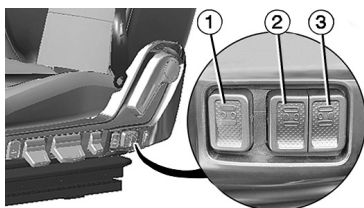


Driver's backrest comfort settings

Backrest side support adjustment (1).

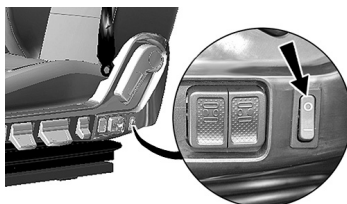
"Lower" lumbar support adjustment (2).

"Upper" lumbar support adjustment (3).



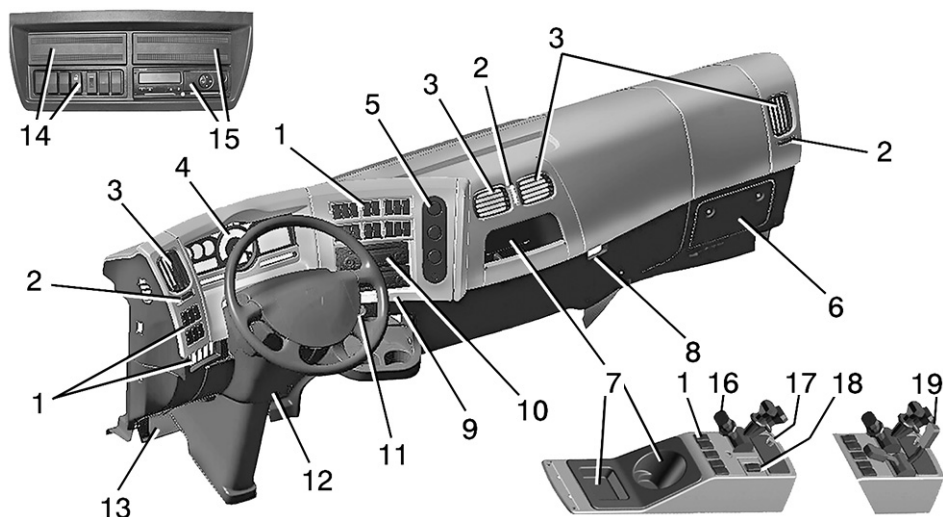
Driver's seat thermal comfort settings

Heated seat cushion and back rest on the driver's seat (automatic thermostat-regulated operation).



Dashboard

get familiar with the dashboard of your Renault Trucks vehicle. So you will know exactly how to optimise your comfort, and how to use each function.



Depending on your vehicle's equipment

- 1 - Switches
- 2 - Ventilation hatch control
- 3 - Ventilation hatch
- 4 - Instrument panel
- 5 - Heater setting panel
- 6 - Fuses
- 7 - Storage compartments
- 8 - 24 V socket (360 W max.)
- 9 - 12 V socket (120 W max.)
- 10 - Modular space (radio)
- 11 - Cigarette lighter
- 12 - Steering wheel adjustment control

- 13 - Diagnostic socket
- 13 - Infomax socket
- 14 - Switches / modular space
- 15 - Modular space (tachograph)
- 16 - Parking brake control
- 17 - Socket for air gun
- 18 - Static trailer brake
- 19 - Trailer brake

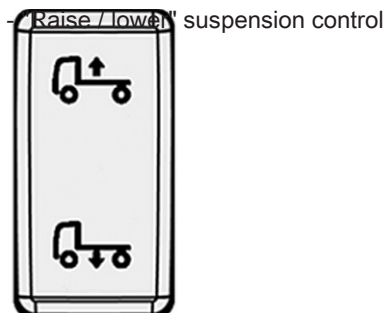
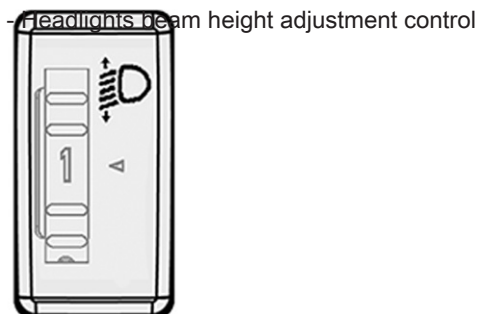
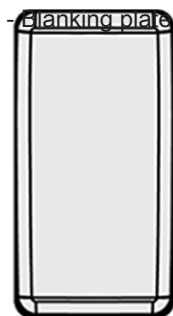
Key to switches

General

Switches that may be fitted in your truck are shown on the following pages.

The switches that are available in your particular truck depend on the truck's equipment and may therefore deviate from the table below.

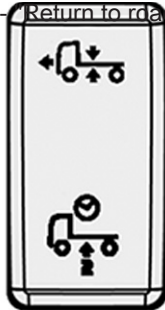
Dashboard (side location)



- "Memory store/recall" control



- "Return to road level/standby" control



- "Axle load shedding" control



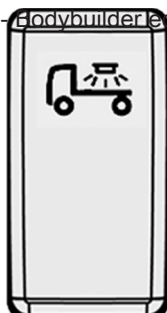
- "Geolocation" control



- Control for starting a machine, bodybuilder equipment



- Bodybuilder equipment lighting control



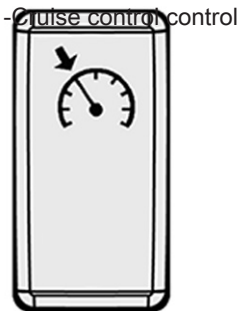
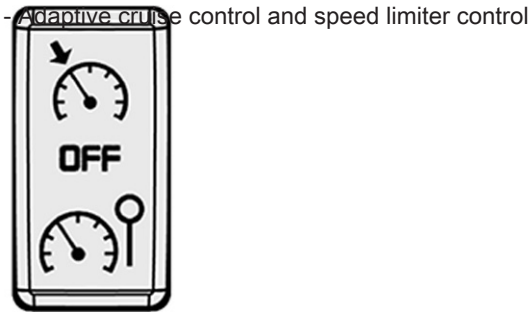
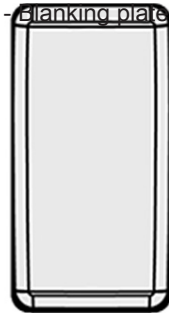
- Bodybuilder equipment tail lift control



- Bodybuilder equipment control



Dashboard (central location)



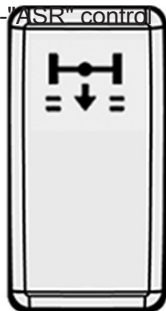
- Hazard warning lights control



- Power take-off control



- ASR[®] control



- Lift-up axle control



Header shelf

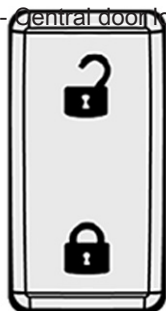
- Long range headlights control



- Reversing buzzer control

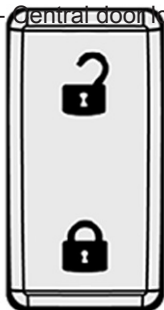


- Central door locking control



Console on engine tunnel

- Central door locking control



Double locking switches

Some functions use double locking switches requiring them to be unlocked for both activation and deactivation.

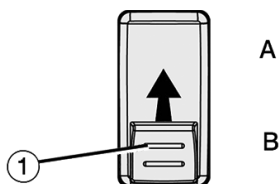
Use

Activating the function:

- push lock (1) upwards and press part A of the switch.

Deactivating the function:

- push lock (1) upwards and press part B of the switch.



Failure to comply with this procedure will cause damage to the switch.

Combined lights and horn stalk switch

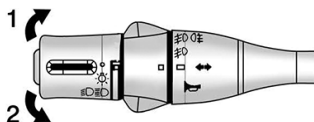
Direction indicator

Operate the control parallel to the steering wheel.

Position (1): RH direction indicator.

Position (2): LH direction indicator.

The control returns automatically.





The warning lights associated with the direction indicator tell you about the status of the system (refer to **instrument panel** section).

Warning buzzer

Press the end of the control.

Warning light

Press the control towards you. Warning pictogram (9) lights up.



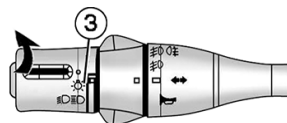
Daytime running lights (DRL)

The daytime running lights illuminate automatically when the ignition is switched on.

The daytime running lights go out automatically as soon as the parking lights illuminate.

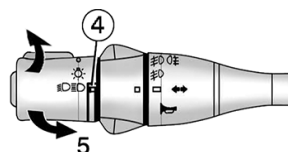
Parking lights (position lights)

Turn the control to position (3).



Dipped beam headlights (low beam)

Turn the control to position (4).



Main beam headlights (high beam)

With the control in position (4), move the control towards you (5). Warning pictogram (9) lights up.

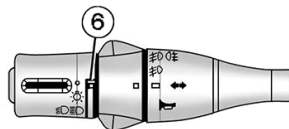
To return to the dipped beam headlights position, move the control towards you again (5).

The instrument panel is lit in all "Lights" positions.



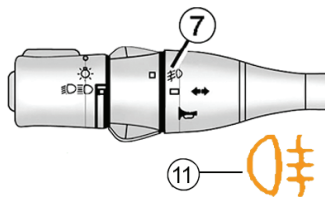
Extinguishing

The control should be in position (6).



Fog lights

In dipped beam headlights position, turn the ring to position (7). Warning pictogram (11) lights up.



Audible alarm

When a front door is opened, an audible alarm is triggered to warn you that the lights are still lit while the ignition has been switched off (discharging of the accumulator batteries).



*If the dipped beam headlights warning pictogram is not displayed, check the operation of the dipped beam headlights; if necessary, replace any defective bulbs (refer to the **Servicing and Maintenance** section).*

If the cause of the fault is not the bulbs, visit a RENAULT TRUCKS garage.

Windscreen wash/wipe control

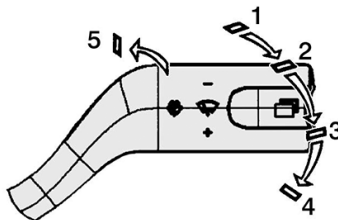
Operate the control parallel to the steering wheel.

Position (1): park.

Position (2): intermittent wiping.

Position (3): slow wiping.

Position (4): fast wiping.



Wiping 2 sweeps:

Lift the control to position (5), allow it to return on its own and the windscreen wiper will quickly perform two return sweeps.

Keeping the control in position, activate the windscreen wiper and the windscreen wash at the same time.

When you stop pressing on the control, windscreen wiper operation cuts off after a few sweeps.

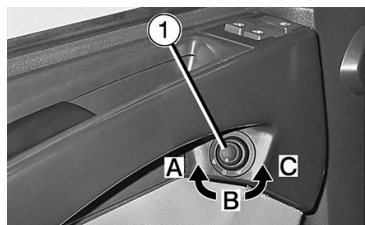
Door mirrors

Your mirrors must be adjusted correctly to be able to drive safely.

Electrically-controlled door mirrors

With the master switch engaged, position control (1):

- on **A** to adjust the left rear-view mirror,
- on **C** to adjust the right rear-view mirror,
- on **B** to make it inactive.



Adjustment

Select the door mirror to adjust then operate the control (1). This is omnidirectional.

De-icing door mirrors

De-icing

De-icing is carried out using switch (2).

The rear-view mirrors are de-iced continuously.

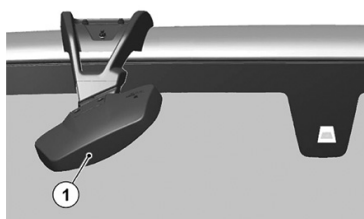


Warning icon (3) appears on the multifunction display during the de-icing function



Forward view mirror

Forward view mirror (1) provides a panoramic view of the front of the vehicle from the driver's seat.



Headlight adjustment

Vehicle unladen: thumb wheel (1) is in position 0.

Vehicle laden: manoeuvre thumb wheel (1) to correct the height of the beam.



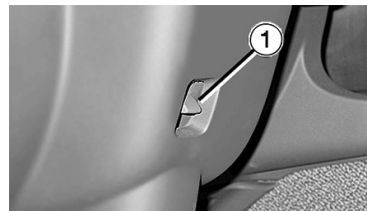
Steering wheel adjustment

Press control (1).

This control is time-controlled.

Pull, raise, lower or push the steering wheel depending on the position required.

Raise control (1) or wait for the time to expire.



Control (1) is operational when the air pressure in the circuit is sufficient.

Instrument panel

All the information required during driving is compiled in the instruments.

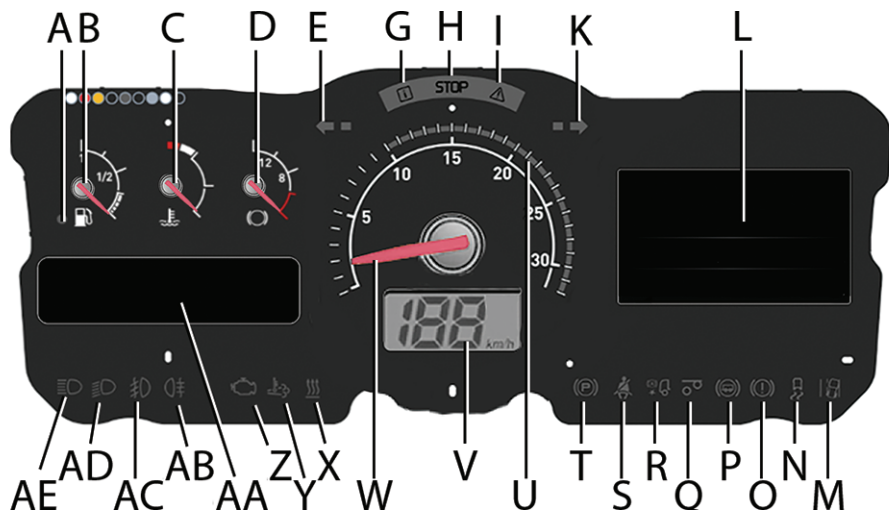
The central part houses the indicators, the information, warning and stop lights, the tachometer and speedometer.

The left-hand display particularly comprises the gauges for fuel level, temperature and exhaust gas filtering system clogging.

The right-hand display shows the information and warning messages when necessary; in other cases, it displays the information of your choice.

Finally, the status warning lights are in the lower part.

You will find a description of the instrument panel in the following pages, with all the warning light captions.



- A - Minimum fuel level warning light
- B - Fuel level indicator
- C - Engine cooling circuit temperature indicator
- D - Air pressure indicator
- E - Vehicle LH direction indicator lights telltale
- G - "INFORMATION" warning light indicating that a new message has appeared on the multifunction information display
- H - "STOP" warning light: stop immediately

- I - "SERVICE" warning light: go to the nearest RENAULT TRUCKS garage
- K - Vehicle RH direction indicator lights telltale
- L - Multifunction information display
- M - Lane Departure Warning System "Alert" warning pictogram
- Lane Departure Warning System deactivated "Information" warning pictogram
- N - Rear view mirror de-icing warning pictogram
- O - "ESC", "ASR", "DTC" operation warning light
- P - Not used
- Q - Lift-up axle warning light
- R - Collision risk "Alert" warning pictogram
- AEBS deactivated "Information" pictogram
- S - Fasten seat belt warning light
- T - Parking brake warning light
- U - Engine operating speed zone
- V - Speedometer
- W - Engine speed counter
- X - Hazard warning lights indicator
- Y - Not used
- Z - Engine electronic fault warning light
- AA - Comfort information display:
 - Clock
 - Exterior temperature indicator
 - Radio
- AB - Fog light(s) warning light
- AC - Fog driving lights warning light
- AD - Dipped beam headlights warning light
- AE - Full beam warning light

Operation of direction indicator lights repeater lights

When the direction indicator lights or hazard warning lights control is activated, indicator (E) or (K) should flash and the audible warning should sound. If indicator (E) or (K) does not work, one of the vehicle lamps is faulty.



If the cause of the fault is not the bulbs, visit a RENAULT TRUCKS garage.

The main pictograms

Depending on your vehicle's equipment

Below are the main pictograms that your vehicle uses to give you information.

They appear on the display and are usually shown alongside text explaining the situation.

Please contact your Renault Trucks dealer for further information.



A text indicating the procedure to be followed or an information message is displayed above the warning light.



- Driver's information warning light
- Service early warning indicator



- Faults present "Information" warning light



- Maintenance not active indicator



- Maintenance alert warning pictogram



- Active maintenance not initialized indicator



- Maintenance due date reached or exceeded indicator



- Information display fault warning light



- Battery warning pictogram
- Battery charge fault warning pictogram



- Engine oil pressure "Warning" light



- Engine oil temperature "Alert" warning light



- Engine oil level "Alert" warning light



- Engine oil level "OK" indicator



- Engine oil level information loss warning pictogram



- Vehicle electronic fault warning light
- Body builder unit fault warning light



- Bodybuilder CAN bus link fault warning pictogram



- Unknown electronic box fault warning light



- Parking brake warning light



- Parking brake off warning light on door opening or when switching on the ignition



- "ABS" warning light System fault "Warning"



- Minimum air pressure "Alert" warning pictogram
- EBS warning light System fault "Warning"



- "ESC" warning pictogram: System fault "Warning"



- "ESC" deactivated warning pictogram



- "ASR" deactivated warning pictogram



- "ASR" off-road warning pictogram



- Brake test indicator



- Brake pad wear warning indicator



- Brakes high temperature warning light



- Air management fault warning pictogram



- Water-in-fuel warning pictogram



- Fuel supply fault warning pictogram
- Clogging detection fault warning pictogram



- Minimum AdBlue level warning light
- AdBlue tank empty warning indicator
- AdBlue valve fault warning pictogram



- Pollution control system fault warning pictogram



- AEBS system fault warning pictogram



- LDWS system fault warning pictogram



- Camera fault warning for AEBS or LDWS



- Engine coolant low level warning indicator
- Engine coolant low level sensor fault warning pictogram



- Engine cooling circuit temperature "Alert" warning lamp



Air filter clogging tell-tale



- Electronic starter fault warning pictogram



- Engine overspeed warning pictogram
- Engine stop on chassis warning pictogram



- Engine electronic fault warning light
- Air preheater "Alert" warning light
- Fuel reheating "Alert" warning light
- Coolant fan "Alert" warning light



- Electronic air suspension "Information" pictogram



- Electronic air suspension "Warning" pictogram



- Adjust suspension height in driving position "Information" warning pictogram



- Retarder fault warning pictogram



- Cruise control activated warning pictogram



- Hill-start assist in service warning pictogram



- Lighting fault warning pictogram



- Gearbox-driven power take-offs in service warning pictogram
Marks (1-2-3) are displayed according to which power take-offs are engaged



- Inter-wheel differential lock in service warning pictogram



- Axle lift load shedding "Information" tell-tale



- Rear steering axle anomaly warning pictogram



- Auxiliary power steering pump fault warning pictogram



- Alarm clock programming warning pictogram



- Rear view mirror de-icing warning pictogram

Gearbox pictograms



- Information pictogram: move gear lever to position (N)



- Information pictogram: move gear lever to position (D)



Information pictogram: use the brakes or retarders



- "Driving on difficult terrain" activated pictogram



- Gearbox oil temperature "Alert" warning light



- Power take-off minimum speed warning light



- Power take-off maximum speed warning light



- Gear engaged in direction opposite to driving "Alert" warning light



- Gear engaged in direction opposite to driving "Alert" warning light

Tachograph pictograms



- Tachograph fault warning pictogram
- Driving information pictogram



- Current driving time indication pictogram



- Accumulated driving time indication pictogram



- Rest time indication indicator



- Accumulated rest time indication indicator



- Working time indication pictogram



- Availability time indication pictogram

Information pictograms for bodybuilder equipment

Depending on your vehicle's equipment



- Body interior lighting pictogram



- Bodybuilder system unlocked warning pictogram



- Bodybuilder system active pictogram



- Reverse prohibited warning tell-tale



- Bodybuilder system in working position pictogram

Warning messages

If the vehicle needs to display a message or if a fault is detected, one or more warning lights will come on the multifunction display while a window appears on the screen at the same time.

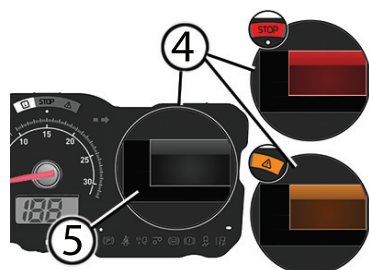
Depending on the importance of the message:

- The "Information" warning light (1) will come on when the vehicle needs to provide information about its operation.
- The "STOP" warning light (2) will come on in the event of a major fault. Stop the vehicle immediately and contact your nearest RENAULT TRUCKS garage. A fault associated with the "STOP" indicator can only be recorded temporarily.
- The "SERVICE" warning light (3) comes on, requiring rapid intervention on your part. If possible, you should identify and resolve the problem, or seek assistance at your nearest RENAULT TRUCKS garage.

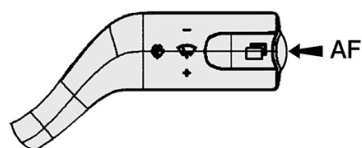


These lights will often come alongside a colour-coded information pop-up on the screen (4).

An icon may provide a specific indication of the nature of the message in (5)

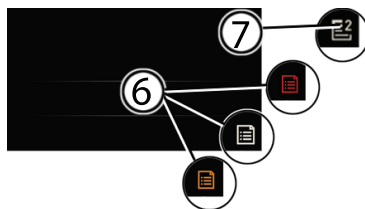


You can log messages by pressing the AF control or the EXIT key (1) on the remote control.



An icon (6) will be shown as a reminder when a fault is logged. The icon colour will depend on the level of importance of the alert.

If more than one fault has been identified, the number of faults will be shown on the icon (7).



Key to warning messages and tell-tales

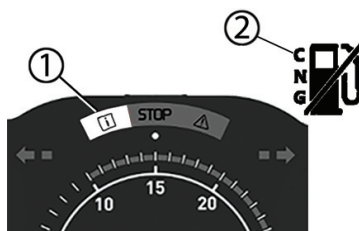
Your CNG vehicle is powered by an engine running on compressed natural gas. If certain faults are detected, it may give you specific alerts that you need to know about.

Tank flap open

If the fuel filler flap has been left open or is not closed properly, a warning light (1) comes on, an icon (2) appears on the display with a message stating "FILLER FLAP OPEN, CHECK SAFETY".

For safety reasons, the vehicle then shuts off all the gas tanks and you will no longer be able to start the vehicle.

Check that the flap is closed. If in doubt, please contact your Renault Trucks garage.



Shock sensor

The shock sensor is triggered by sudden action, mishandling, excessive vibration or an accident.

For safety reasons, the vehicle then shuts off all the gas tanks and you will no longer be able to start the vehicle.

Check the condition of the tanks and the circuit to make sure there are no leaks or faults.

Press the sensor to reset only if there are no leaks or faults. If in doubt, please contact your nearest Renault Trucks garage.



Gas outlet valve failure

If this happens, the main hazard is the over-consumption of gas and loss of vehicle range. Check the condition of the tanks and the circuit to make sure there are no leaks or faults.

Contact your nearest Renault Trucks garage to arrange diagnostics and repairs for your vehicle.



Gas pressure sensor failure

If this happens, the vehicle may go into a degraded mode. Check the condition of the tanks and the circuit to make sure there are no leaks or faults.

Contact your nearest Renault Trucks garage to arrange diagnostics and repairs for your vehicle.



Use of the tachograph

The tachograph records the vehicle speed and the drivers' driving and rest time. The drivers, companies and authorities can use the recorded information to check that the rules are being followed.



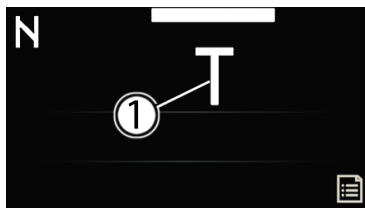
To prevent damage to the tachograph, carefully read manufacturer's user guide supplied with your vehicle's on-board documents .

The vehicle is equipped with a digital tachograph where the driving and rest times are recorded digitally on the driver's card.

Ignition on

The appearance of an icon (1) and its associated message may occur if the driver card is missing from the reader or if the tachograph drawer is not closed.

If the icon (1) and its associated message do not disappear after inserting the driver card or closing the drawer, please visit your nearest RENAULT TRUCKS garage as soon as possible to arrange for a repair.



Ignition off

If the tachograph printer drawer stays open when switching off the ignition, an audible signal sounds and warning pictogram (1) and its associated message (2) appear on the multifunction information display.

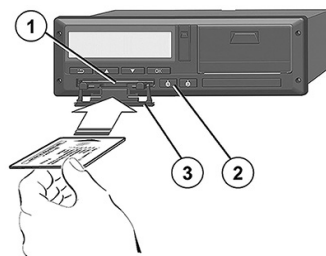
Close the tachograph printer drawer again.



If the vehicle is to be laid up for a prolonged period of time (more than 10 days), disconnect the circuit by removing fuse (F68 - F98) to avoid discharging the batteries through the tachograph.



The vehicle must be stopped and the ignition switched off when inserting or ejecting the driver card into or from tachograph card reader (1). Hold the Driver (2) button for approximately 2 seconds, open the card reader slot (3) and insert or remove the driver card, then close the slot. Ejecting the card will automatically reset the drive and rest time information indicated on the multipurpose display. After inserting a driver card, the settings of the multipurpose display will automatically be applied after a few seconds.



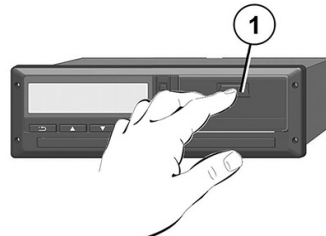
During loading of the driver card data in the tachograph, it is possible to select an activity and to drive.

Installing a roll of paper



This operation should be performed with the vehicle stationary and the ignition switched off.

Press part (1) to open the printer drawer.



DEPENDING ON THE AMOUNT OF PRINTING CARRIED OUT, THE THERMAL PRINTING HEAD MAY BE VERY HOT AND BURN THE FINGERTIPS.

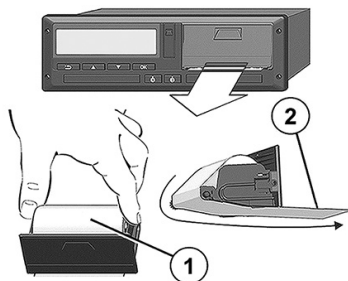
Open the printer drawer and remove the old paper roll (1).

Place the new paper roll (1) and guide it onto the roller.

Ensure that the end of the paper strip (2) is sticking out of the bottom of the drawer edge (see illustration).

Push the printer drawer back in until it locks.

The printer is ready to operate.



Only rolls of paper with the following specifications may be used:

- type approval marking **"e1 84"**,
- approval marking **"e1 174"**,
- RENAULT TRUCKS part number: 50 01 867 410.



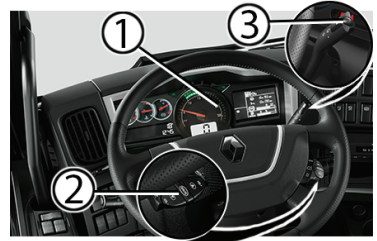
ENSURE THAT THE PRINTER DRAWER REMAINS CLOSED AT ALL TIMES TO PREVENT ANY RISK OF BEING CUT BY THE PAPER CUTTING BLADE.

General points about the multifunction display

Located on the right-hand side of your dashboard, the display is an essential vehicle driving aid.

The display (1) allows you to see the status of your truck at any time and make any necessary adjustments, regardless of whether or not its functions are switched on.

Behind the steering wheel on the right, the planet gear (2) and the button at the end of the stalk switch (3) allow you to browse through the menus.

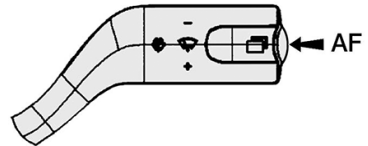


Description of the multifunction display controls

The function of control (AF) varies depending on where you are in the additional driving information, in one of the menus or submenus.

Additional driving information

- Each time control (AF) is pressed, the following additional information screen is displayed.
- When a fault or information is displayed in the main display area of the multifunction information display, pressing control (AF) transfers the indicators for active functions or faults present to the reminder area, see Multifunction information display page 82.



Menus

Press and hold control (AF) to go directly (**without confirmation**) to the additional driving information.



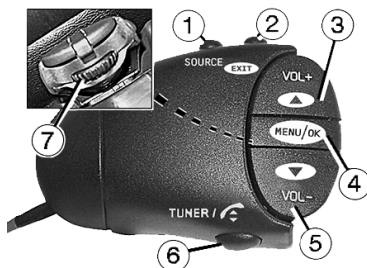
*If there is no action on the button for approximately 30 seconds, the information display reverts directly (**without confirmation**) to the additional driving information.*

Radio/information display remote control

The "radio/information display" remote control located under the steering wheel can be used to adjust the radio without releasing the steering wheel. It can also be used for "navigating" through the various menus of the multifunction information display.



IN "INFORMATION DISPLAY" MODE, FOR SAFETY REASONS, IT IS RECOMMENDED TO USE THE REMOTE CONTROL WITH THE VEHICLE STATIONARY AND PARKED CORRECTLY.



Functions

1. Select radio source (FM, AM, USB, AUX), depending on compatible equipment connected to the radio.
2. No functions associated with the radio/exit the menu or return to the previous setting (multifunction information display).
3. Increase volume (radio)/navigate the menus or adjust settings (multifunction information display).
4. No functions associated with the radio/access the menu or sub-menu selected/confirm settings (multifunction information display).
5. Decrease volume (radio)/navigate the menus or adjust settings (multifunction information display).
6. **Radio:** Change tuner mode (PRESET, AUTO, MANU) by a brief press / answer and end a phone call.
Media: Go to the next folder.
Bluetooth® telephone: Briefly press to answer or hang up. Only during a call, press and hold to transfer a call without going through the hands-free mode.
7. **Radio:** Scroll through presets in PRESET mode, stations in LIST mode, Bluetooth® or USB tracks, or search for frequencies in AUTO or MANU mode (radio) / scroll through menus (multifunction information display).
Media: Scroll to previous or next tracks on USB or Bluetooth®.

Combined action on buttons 3 and 5 activates the MUTE function in tuner mode, and the MUTE PAUSE function in media mode.

Multifunction information display

Description:

The multifunction information display is divided into 4 separate zones.

Area (1)

Information relating to the use of the gearbox and retarder.

Area (2)

This is the main display area; the various menus, additional driving information, air pressure in braking system indicator, warning and information lights are displayed here.

When the ignition is switched on:

- the warning lights relating to the self-test are displayed for a few seconds.
- if the engine is not started immediately, the oil level is displayed.

When driving:

When you activate a new function or if a fault occurs on the vehicle, the indicator light representing the function or fault is displayed in area (2).

Pressing the windscreen wiper control button makes it go back to area (3). If the fault is associated with the **"STOP"** indicator, it will reappear after 5 seconds without any action from the driver.

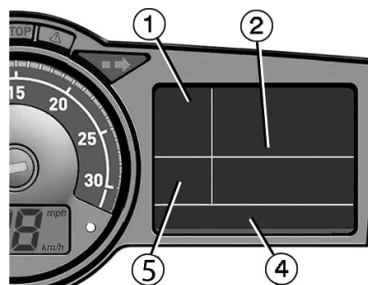


The colour of the display in area (2) will change to attract your attention, depending on the importance of the message:

- For driving or equipment information, the display will use grey and white colours.
- The display will turn orange to indicate important information or a fault requiring your attention.
- The display will light up red if a major fault requires the vehicle to be stopped immediately.

Area (4)

Reminder area for icons showing active functions or faults present.



Multifunction information display

The messages displayed in (2) will switch to this area when button (2) on the remote control is pressed.

Some functions will be displayed directly in area (4) without passing via area (2).



The function icons are displayed from left to right, the information icons on the right.

Refer to **Fault(s) display** section.



When the area (4) is full, only priority indicator icons are displayed.

See chapter **Driving**.

Area (5)

Information about cruise control.

See the chapter on **Cruise control**.

Additional information on driving in the area (2)

Tachograph information

Total driving time (1).

- The cumulative driving time displayed on the instrument panel is the effective vehicle driving time (speed other than 0 km/h).
- Short traffic-related stops are automatically deducted.

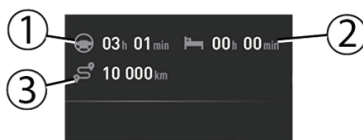
Total rest time (2).

- The cumulative rest time is incremented based on continuous 15-minute periods of rest or availability.

Information on distance travelled (3).



The times displayed are given as examples. Only the data recorded on the driver card or on the disc have legal force.

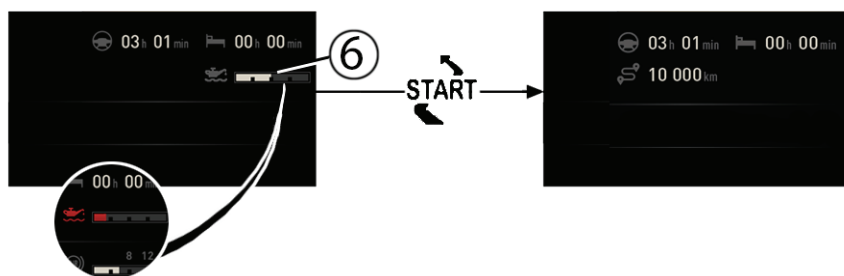


This information shall be reset when the driver's card is retrieved or when driving or working is resumed after 46 minutes of cumulative rest.



The oil level is shown in (6) before starting the engine.

If the level is too low, it will appear in red.



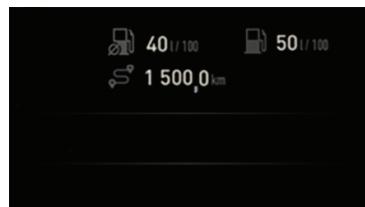
Using the control (AF) (please refer to the **Description** chapter), it is possible to display successive information.

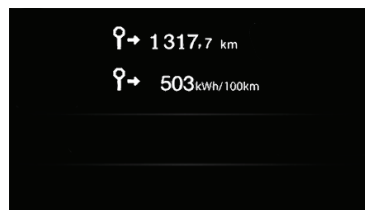
This information is displayed for a set time when the ignition is switched on, with the engine running or at rest, and when the vehicle is not moving.

Once the vehicle starts moving, if you select an item of information, this will continue to be displayed permanently.

Instantaneous fuel consumption in litres per 100 km (vehicle moving) or in litres per hour (vehicle static) and partial mileage/kilometres

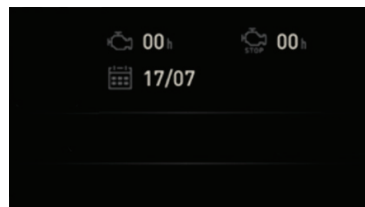
- The instantaneous fuel consumption is given as a guide only; it can reach high values during acceleration or when starting, but is not significant for the average fuel consumption of the vehicle.
- Distance covered since the last reset.
- Average consumption in litres per 100 km.
 - This information is zero reset using control (AF), by pressing for longer than 3 seconds.





Engine operating hours counter

- Engine operating hours.
- Engine operating hours (vehicle static).
- Date.

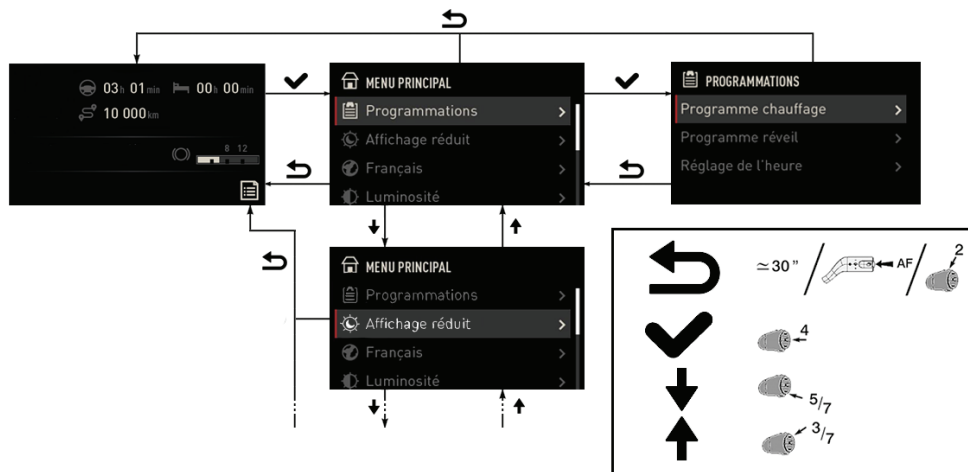


Adaptive cruise control

- Information related to chosen adaptive cruise control mode:
 - target speed,
 - adaptive cruise control mode is selected,
 - distance between you and the vehicle in front of you,
- Function on/off



Menus and submenus



Buttons 1, 2, 3, 4, 5, 6, 7 refer to the steering wheel-mounted radio/information display remote control and AF on the button at the end of the windscreen wiper control. See description of the controls at the start of the chapter.



Main menu

- Programming. In this menu, you will find sub-menus:
 - 1: Alarm clock programming
 - 2: Setting the time
- Reduced display
- Selected languages (the display will show this menu in the language that is currently selected). You have a choice of three different languages.
- Brightness.
- Sound level adjustment. In this menu, you will find sub-menus:
 - 1: Sound level
 - 2: Info

- Info reminder.
- Equipment message.
- Experts. In this menu, you will find sub-menus:
 - 1: Self-test
 - 2: Maintenance
 - 3: Diagnostics
 - 4: km/h - mph
 - 5: Dynamometer
 - 6: Additional info

For using the various menus, see following page(s).



When driving, only the "reduced display", "brightness" and "sound volume" menus can be accessed.

Alarm clock programming

The alarm clock programming is controlled from the display.

- To activate the function, select "alarm clock programming" using the steering wheel-mounted remote control.

Use buttons (3) - (5) or the thumbwheel (7) on the remote control to make choices in the menus.

Confirm with button (4).

The choices available are:

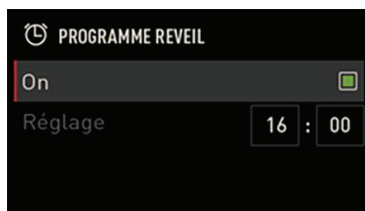
Activate or deactivate the alarm clock.

Select the day when the alarm clock is activated.

Change the alarm clock hour and minute times.

Once you have confirmed your settings, exit the menu by pressing button (2).

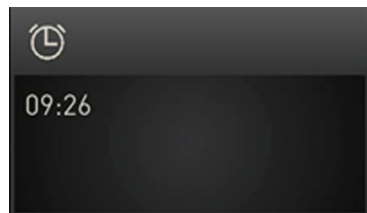
For setting the time, see the next paragraph.



When the alarm clock has been programmed, pictogram (1) illuminates on the multifunction information display.

To stop the alarm, press control (AF) or remote control buttons (4) - (2).

This manoeuvre deactivates the alarm clock function.



The alarm clock must be reactivated each time the alarm has been stopped.

Setting the time and date

The time programming is controlled from the display. Make sure that the time shown is accurate because some vehicle functions depend on it (registering fault codes, alarm clock function, etc.).

C - Setting the time on an ADR vehicle

This function is used to set the time on the instrument panel and the date.

Setting the time and date

Setting the time:

- Set the minutes using buttons (3) - (5) or the thumbwheel (7) on the remote control. Confirm using button (4) to go to the next setting.
- Set the hours using buttons (3) - (5) or the thumbwheel (7) on the remote control. Confirm using button (4).



Set the date:

- The date cannot be adjusted on vehicles fitted with a tachograph.

Once you have confirmed your settings, exit the menu by pressing button (2).

Reduced display

This function reduces the brightness of the multifunction information display for the viewing comfort of the driver.



If a message or warning is displayed, the information display brightness reverts automatically to the initial setting.

Pressing button (4) on the remote control activates or deactivates the multifunction information display lighting.

Pressing button (AF) on the windscreen wiper control (refer to the **Description** section) takes you directly to the additional driving information.

Languages selected

This menu is displayed under the name of the currently selected language.

Choose language via remote control buttons (3) - (5) or thumb wheel (7).

Confirm choice via button (4).

By default, three languages are offered. The choice of languages can be modified at a RENAULT TRUCKS garage.

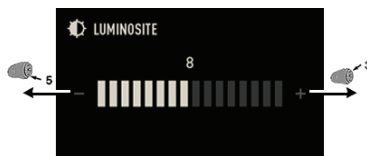
Brightness adjustment

This function can change the instrument panel brightness.

- Remote control button (3) = increase
- Button (5) = reduce
- Button (4) = confirm



This setting may only be made with the lights lit.





When the lights are lit, the brightness of the instrument panel lighting varies according to the lighting level detected inside the cab by cell (1).



Sound level adjustment

This menu is divided into two submenus:

- Audio volume adjustment.
- Activation or deactivation of the display sounds.

F - Sound level adjustment

1 - Sound level

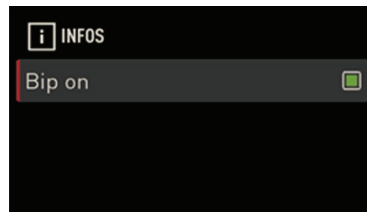
This function adjusts the volume level.

- Remote control button (3) = increase
- Button (5) = reduce
- Button (4) = confirm



2 - Info

This function or deactivates the beep emitted when receiving information.



Choose **Bip ON or Bip OFF** line via remote control buttons (3) - (5) or thumb wheel (7).
Confirm choice via button (4).

Information display

Info reminder

This function is used to view the active functions and faults present at the time of viewing this menu, by displaying the corresponding pictograms.

Equipment message

This function is used to view the bodybuilder functions that have been initialized.

Expert

This menu is divided into six submenus.

1 - Self-test

This test checks the operation of the instrument panel instruments.

2 - Maintenance

- 2-1 - Engine drive belt(s)
- 2-2 - Air filter
- 2-3 - Coolant
- 2-4 - Dryer (APM)
- 2-5 - Gearbox oil
- 2-6 - Engine oil
- 2-7 - Brake linings
- 2-8 - Last brake change
- 2-9 - Alternator brushes
- 2-10 - Starter motor brushes
- 2-11 - Drive axle oil
- 2-12 - Regulatory inspection
- 2-13 - Tachograph check
- 2-14 - Brake linings

Choose the function via remote control buttons (3) - (5) or thumb wheel (7).

Confirm by pressing button (4).



*For more information on interpreting the display, refer to the **Driving** section.*

Resetting the engine oil maintenance interval to zero

Choose the function via remote control buttons (3) - (5) or thumb wheel (7).

Confirm by pressing button (4).

The interval is reset by pressing button (4) for longer than 10 seconds.

This interval requires the oil to be selected. This selection generates a new interval which will be calculated and modified depending on engine use. The new interval will be displayed after approximately one hundred hours of engine operation.

2-6-1 - Oil grade

2-6-1-1 - RLD-3

2-6-1-2 - RLD-3 MIN

Resetting a maintenance other than the engine oil

Choose the function via remote control buttons (3) - (5) or thumb wheel (7).

Confirm by pressing button (4).

The interval is reset by pressing button (4) for longer than 10 seconds.

3 - Diagnostics

This menu is divided into five submenus.

- 3-1 - Transponder:
Choose value via remote control buttons (3) - (5) or thumb wheel (7).
Confirm by pressing button (4).
 - (1): "Code correct": the vehicle can be started.
 - (2): "Code incorrect": switch off the ignition and start again.
 - (3): "Antiscanning": you have made three consecutive code errors. The system is now locked for 15 minutes. Leave the ignition on and try again after this time.
- 3-2 - Faults present
- 3-3 - Flashing codes
- 3-4 - Part references
- 3-5 - Stored faults

4 - Km/h - mph

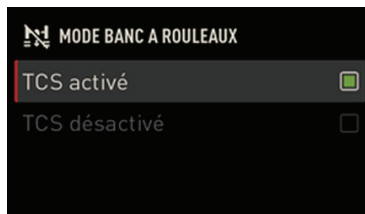
Choose the unit via remote control buttons (3) - (5) or thumb wheel (7).

Confirm by pressing button (4).

5 - Dynamometer mode

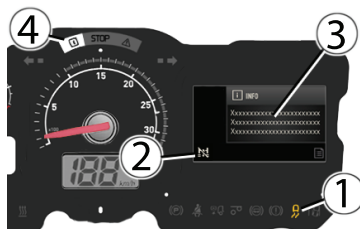
Choose the **Activated** or **Deactivated** function via remote control buttons (3) - (5) or thumb wheel (7).

Confirm by pressing button (4).



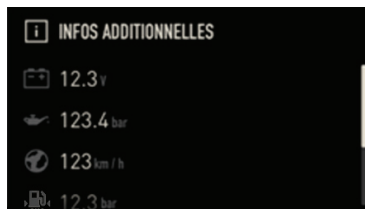
After deactivating the function:

- pictogram (1) and "Information" light (4) illuminate,
- pictogram (2) and associated message (3) are displayed on the multifunction information display informing you that you are in dynamometer mode.



6 - Additional info

- Battery voltage,
- Engine oil pressure,
- Average speed
- Gas pressure in the tank.



Some of these submenus are in turn divided into submenus which generally represent each of the ECUs fitted on your vehicle.



Living

Living

Your truck offers you other features for improving your comfort. To guarantee your safety, and help your vehicle last a long time, make sure to use these objects as they were designed to be used (socket power rating, etc.).

Nomad ashtray:

Nomad ashtray (1) must always be stored in one of the locations provided, with the cover closed after use.

Check that this safety requirement has been complied with before driving the vehicle or tilting the cab.



12 V/24 V comfort power sockets



Observe the maximum power rating permitted by the in-cab sockets:

- $12V / 10A = 120 W$
- $24V / 15A = 360 W$



Do not connect adapters to the cigar lighter.



It is strictly prohibited to store flammable materials inside the cab.

Installation of accessories

The flat surface of location (1) allows you to install a holder for a device.

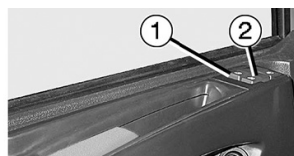
Ensure that the bolts do not penetrate the dashboard by more than 10 millimetres.



Window controls

For your health, be sure to ventilate the interior of the cab frequently.

- (1) - Left side window control, driver's side.
- (2) - Right side window control, driver's side.
- (3) - Right side window control, passenger side.



Use of controls

Down

Press on the back of the control.

Up

Press on the front of the control.



Roof ventilation hatch

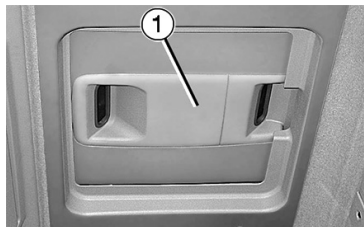
For your health, be sure to ventilate the interior of the cab frequently.

Opening

Push ventilation hatch (1) to the required opening position.

Closing

Return the ventilation hatch to its initial position.



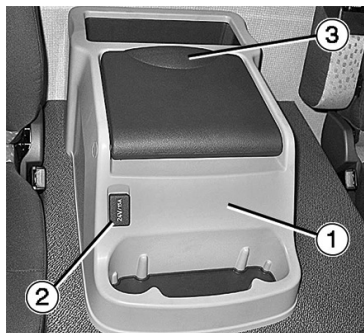
Interior storage units

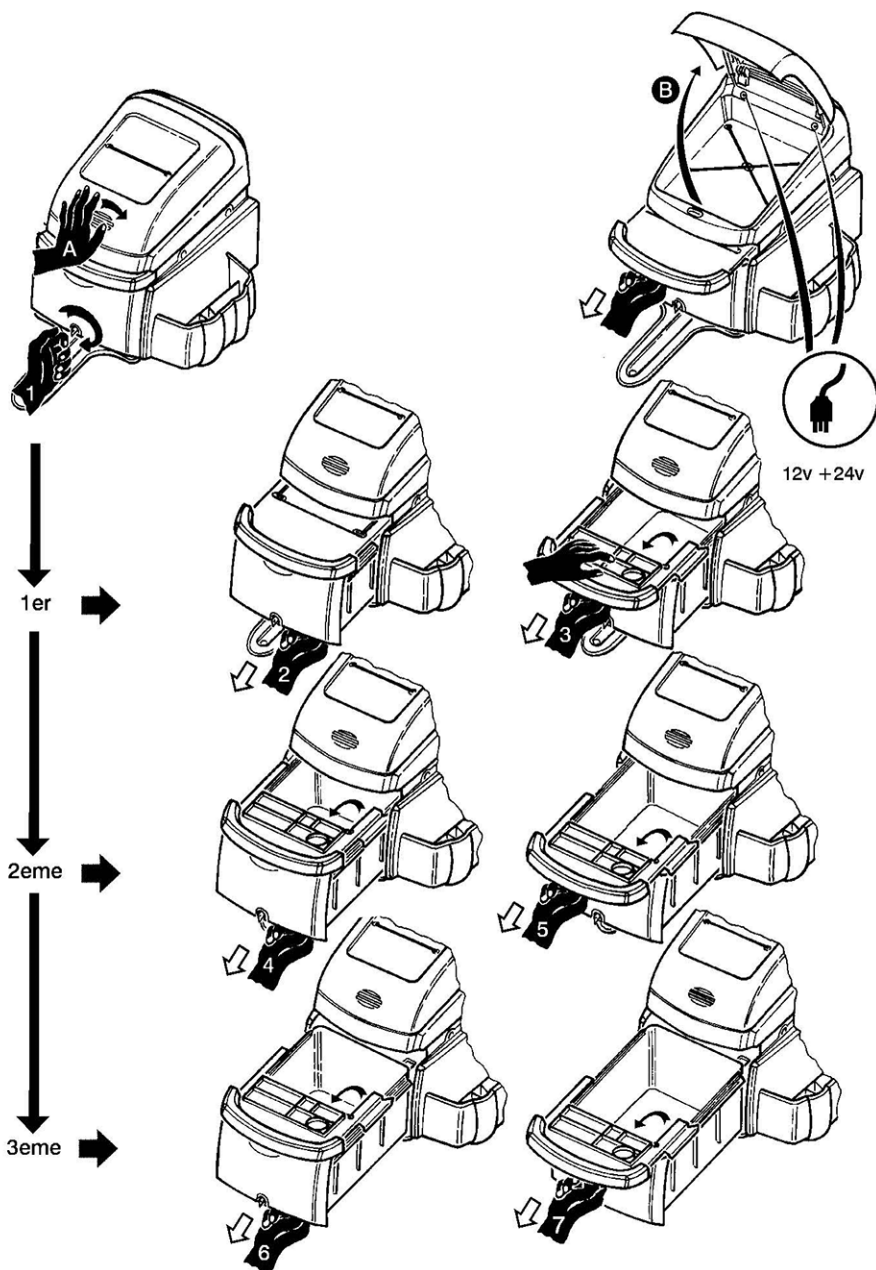
Your Renault Trucks vehicle is fitted with large practical storage spaces in the cab.

Storage compartment(s)

Centre storage compartments

Depending on assembly, storage bin (1) is equipped with a 24V / 15A socket (2). To open the storage bin, use cover handle (3). Once the storage bin cover is open, you can use it as a table (4).





Assembly fitted with doors.

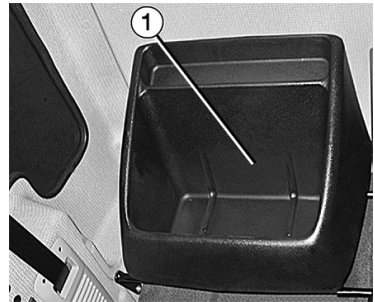
To open, pull on door handle (1).

To close, push the door until it engages automatically.

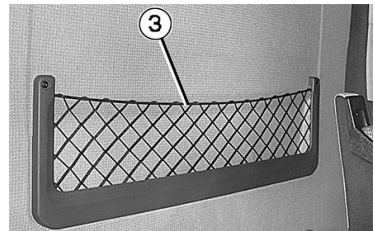


Storage behind cab

1. Storage compartments.



3. Glove box with cargo net.



Cab roof lamp

Your cab is fitted with roof lamps to ensure optimum lighting inside, even at night.

Cab lighting

When changing a bulb on an overhead light, replace with a bulb of the same output, ensuring you replace the transparent cover.

Tablet holder

This equipment is intended exclusively for the use of applications in line with the transport applications available on the tablet.

Tablet holder (1) is used for installing a 7, 8 or 10-inch tablet with a maximum weight of 715 g.

Depending on the size of your tablet, you may install it in either portrait or landscape orientation.



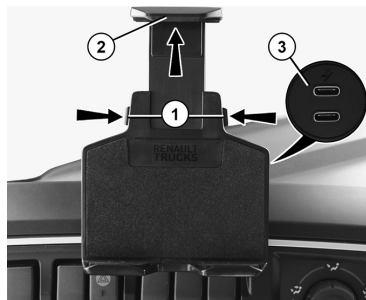
During driving, this equipment must never be used for viewing movies, videos or other similar applications which could distract your attention and prove to be dangerous.

To install the tablet in the holder:

- press buttons (1) simultaneously,
- fold out arm (2) completely,
- install the tablet on the holder,
- press on arm (2) to adjust and secure the tablet to the holder.

To remove the tablet from the holder:

- press buttons (1) simultaneously to unlock arm (2),
- remove the tablet.



USB ports (3) are available behind the tablet holder to connect the tablet to the electrical power supply.

Tablet holder (1) is removable, pivot it to make removal easier.

Once removed, the dashboard centre storage compartment may be used as a holder.



The tablet holder includes a magnet. If too close, there is a risk of it interfering with certain electrical devices or magnetic media such as bank cards, USB keys, pacemakers, etc.



RENAULT TRUCKS cannot be held responsible for the incorrect or inappropriate use of this equipment.

In no case can RENAULT TRUCKS be held liable for any damages to the user or third parties in the event of damage to equipment or personal injury associated with or caused by the use of this equipment.

Safe use of the radio

When you are driving, all your attention should be on the road. Even if the radio is on while you are driving, your attention should still be on the road.

Because of this, you are strongly advised as follows:

- Do not use a mobile phone or similar device while driving.
- Adjust the volume of the audio system so you can still hear noises outside the vehicle.

Introduction

These instructions will help you to learn and use the main functions of the on-board radio.

The main functions of the audio system are:

- Radio
- USB
- Streaming via Bluetooth®
- Auxiliary audio input*
- Hands-free (with Bluetooth® telephone)

*Depending on equipment.

Reference guide for radio



A - Button 1

Radio: briefly press the button to select a station.

Radio: hold the button down to save a station.

B - Button 2

Radio: briefly press the button to select a station.

Radio: hold the button down to save a station.

Media: briefly press the button to start shuffle play. Playback is random over the whole medium or the current folder depending on the playback mode selected by button E (repeat folder or repeat off).

C - Button 3

Radio: briefly press the button to select a station.

Radio: hold the button down to save a station.

Media: briefly press the button to play a track.

D - Button 4

Radio: briefly press the button to select a station.

Radio: hold the button down to save a station.

Media: briefly press the button to pause the current track.

E - Button 5

Radio: briefly press the button to select a station.

Radio: hold the button down to save a station.

Media: briefly press to repeat playback of a track or a folder.

F - Button 6

Radio: briefly press the button to select a station.

Radio: hold the button down to save a station.

G - Exit button

Radio: automatic search.

Media: briefly press to select the previous track. Hold down for fast backward.

Bluetooth® telephone: reject an incoming call or hang up.

Menu: go back.

H - OK button

Radio: automatic search.

Media: briefly press to select the next track. Hold down for fast forward.

Bluetooth phone® : accept an in-coming call.

During call: press and hold to transfer a call to the telephone in hands-free mode.

Menu: confirm the current step or "next setting".

I - Search down button

Radio: manual tuning downwards.

Media: previous folder.

Menu: previous menu line.

J - Search up button

Radio: manual tuning upwards.

Media: next folder

Menu: next menu line.

K - "MENU" button

Radio: briefly press to enter or exit the menu.

L - "AUDIO" button

Open/close audio settings.

M - TA: traffic announcements

Radio: enables or disables traffic information messages, rejects current messages.

N - "123" button

Radio: briefly press the button to go from one preset range to another. The radio has three preset ranges in each of the AM, FM and DAB bands (according to options); (AM1, AM2, AM3 and FM1, FM2 and FM3, DAB1, DAB2 and DAB3)

O - "RADIO" button

Radio: to select FM or AM mode.

Media: to switch from media mode to tuner mode, then returns to the last station listened to (Band, bank and preset)

P - "MEDIA" button

Radio: switches from tuner mode to media mode, selects the last media used (USB, BT streaming, AUX)

Media: switches between the various media available (USB, BT streaming, AUX)

Q - Thumb wheel/"PWR" power button

Hold the button down to switch the system on or off.

When the radio is on, a brief press activates the mute function (switches off the sound without stopping media playback).

Turn the thumb wheel to adjust the volume.

R - Display

Radio information is displayed in two different ways:

- on the radio screen;
- on the instrument panel screen.



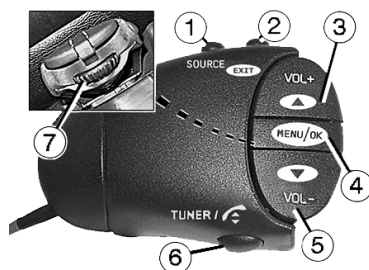
All information is displayed on the radio, but only information from the current source is displayed on the instrument panel. Menus and audio settings are displayed only on the radio.

STOP

WHEN YOU ARE DRIVING, DO NOT TRY TO MODIFY OR VERIFY THE INFORMATION DISPLAYED. KEEP ALL YOUR ATTENTION ON THE ROAD AND THE OTHER ROAD USERS AROUND YOU. BEING DISTRACTED WHEN DRIVING CAN LEAD TO SERIOUS ACCIDENTS THAT CAN RESULT IN SIGNIFICANT MATERIAL DAMAGE, INJURIES AND DEATH. YOU WILL BEAR FULL RESPONSIBILITY FOR ANY INCIDENT OR ACCIDENT CAUSED BY LACK OF ATTENTION. CONSIDER STOPPING TO USE THE RADIO OR REVIEW THE INFORMATION.

Radio/information display remote control

The "radio/information display" remote control located under the steering wheel can be used to adjust the radio without releasing the steering wheel. It can also be used for "navigating" through the various menus of the multifunction information display.



STOP

IN "INFORMATION DISPLAY" MODE, FOR SAFETY REASONS, IT IS RECOMMENDED TO USE THE REMOTE CONTROL WITH THE VEHICLE STATIONARY AND PARKED CORRECTLY.

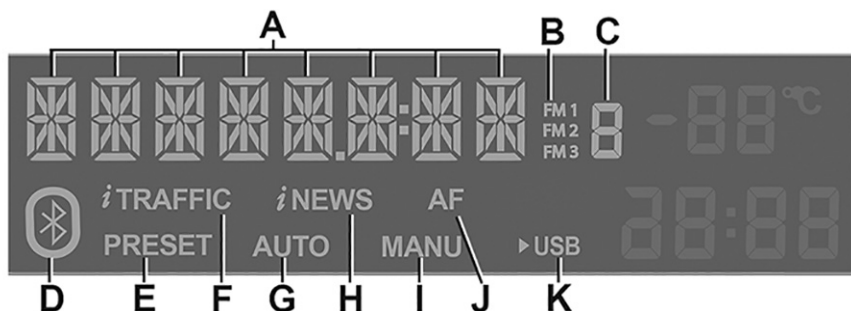
Functions

1. Select radio source (FM, DAB, AM, USB, BTstr, AUX), depending on compatible equipment connected to the radio.
2. No functions connected to the radio.
3. Increase volume (radio)/navigate the menus or adjust settings (multifunction information display).
4. No functions connected to the radio.
5. Decrease volume (radio)/navigate the menus or adjust settings (multifunction information display).
6. **Radio:** Changing the tuner mode (LIST, PRESET, AUTO, MANU).
Media: Go to the next folder.
Bluetooth® telephone: During a call, press briefly to pick up or hang up. Only during a call, press and hold to transfer a call without going through the hands-free mode.

7. **Radio:** Scroll through presets in PRESET mode, stations in LIST mode, Bluetooth® or USB tracks, or search for frequencies in AUTO or MANU mode (radio) / scroll through menus (multifunction information display).

Combined action on buttons 3 and 5 activates the MUTE function in tuner mode, and the MUTE PAUSE function in media mode.

Display



A - 8 alpha-numeric characters

Radio: Displays the station current (name or frequency).

USB: Displays the track, time elapsed, ID3 information (title, artiste, etc., and/or the name of the MP3 file).

Bluetooth® : Displays the time elapsed and the title of the track if they are transmitted by the connected device (depends on the device). Displays BTSTREAM if no information is transmitted.

AUX: Displays AUX.

B - FM1, FM2 and FM3

Radio: Displays the active FM bank of presets.

C - Preset number

Radio: Displays the preset number (from 1 to 6).

D - Bluetooth®

Bluetooth mode activated. Indicates that a telephone is connected when the symbol is surrounded.

E - Preset

Radio: Displayed if the Tuner is in Preset mode.

F - I-Traffic

Displayed when the function is active, and flashes when a message is transmitted.

G - Auto

Radio: Displayed if the Tuner is in Auto.

H - I-News

Displayed when the function is active, and flashes when a message is transmitted.

I - Manu

Radio: Displayed if the Tuner is in Manual mode

J - AF

Displayed if the alternative frequency is activated (RDS)

K - USB

Displayed when a USB device is detected

Starting

Menu

Numerous settings are adjusted from the radio menu. You can access the menu by pressing the "MENU" button.

Language

If AUTO is selected, the radio will use the same language as used for the instrument panel. To change the language, select:

- 1 - Press "MENU" button.
- 2 - Press the top or bottom button until the current language is highlighted.
- 3 - Press "OK" to scroll through the various languages. Select "AUTO" for the radio language to match the language on the instrument panel.
- 4 - Now EXIT and the change takes effect immediately.



If the language on the instrument panel is not available for the radio, in AUTO the default language will be English

Switch on, switch off and mute the sound

Briefly press the POWER button to switch on the radio. Long press (about 1s) to switch off the radio.

Press briefly to MUTE the radio (switches off the radio sound). Press briefly again to set the sound to the same volume as before.



The radio is equipped with a temperature sensor.

In the event of overheating (temperature of above 70°C), there may be a noticeable reduction in performance (reduced bass level, display slowing, etc.).

If a second threshold of above 85°C is reached, the radio will be switched off to protect it from damage.

After the temperature drops, the radio may be switched back on and the original settings will be resumed.

Use of radio

The radio allows you to listen to the AM/FM stations and record their frequency in the vehicle memory to find them again more easily.

Select a mode (AM/FM)

Radio mode

Select an AM/FM radio band

After switching on the radio, press the "RADIO" button to select the source.

The radio automatically switches on to the last source used (FM, AM, or media). If the media source is not available (USB device disconnected, for example), it will activate the previous source.

Use the "RADIO" button to switch between FM and AM.

Store a radio station

You can store a maximum of 18 stations for the FM and AM bands, in other words one radio station for each button 1 to 6 in three banks of different presets: no. 1, no. 2 and no. 3. Change the bank of presets by pressing the "123" button.

Please follow these instructions to store a radio station on one of the buttons numbered 1 to 6:

- When the station required is played by the radio, choose the bank of presets required using the 123 button (for example FM1) then hold down one of the buttons 1 to 6.
- An audible beep confirms that the station has been stored.

- Select a stored radio station by briefly pressing the number button.



When switching of the ignition the first time after a radio station has been stored, wait 20 seconds before opening the ADR switch, or the stored station will not be memorized.

Search for station

Search for a radio station in AUTO

Regardless of the tuner mode (LIST, PRESET, AUTO, MANU) briefly press one of the auto search buttons (arrow to the right or left). When a station is found, the search stops automatically. Repeat the operation to find the station required.

It is also possible to do an AUTO search using the steering-wheel-mounted controls. The tuner should be in AUTO mode (select this mode using the "TUNER" button); move the thumb wheel up or down to start searching. When a station is found, the search stops automatically. Repeat the operation to find the station required.

In List mode, the left-hand and right-hand arrow keys are used for scrolling through the radio stations in the list in alphabetical order or reverse alphabetical order.

In Preset mode, the left-hand and right-hand arrow keys are used for scrolling through the preset ranges 1, 2 and 3.

In Auto mode, the left-hand and right-hand arrow keys are used for searching for the previous/next station automatically.

Manual tuning

Regardless of the tuner mode (LIST, PRESET, AUTO, MANU), press and hold the button arrow up or down to find the frequency required.

It is also possible to do a manual search using the steering-wheel-mounted controls. The tuner should be in MANU mode (select this mode using the "TUNER" button); move the thumb wheel up or down to scroll through the frequencies in steps of 0.1 MHz on FM, and 3 kHz on AM.

Automatic search (LIST mode)

The tuner must be in LIST mode in order to scroll through the stations; turn the steering column-mounted control until the required station is reached or use the left-hand and right-hand arrow keys on the radio. LIST mode enables you to find all available radio stations, classified in alphanumerical order.

RDS

Radio Data System (RDS)

Numerous stations throughout Europe use RDS. The system includes functions such as automatic frequency change (AF) and signals activating traffic announcements (TA) and news.

Alternative frequency (AF)

The range of FM station frequencies is fairly limited. For this reason, many radio stations broadcast on alternative frequencies in different sectors.

The AF function has two modes, regional and normal.

- regional mode, for following the regional programme of a broadcasting network; when signal quality degrades, the radio changes transmitter depending on vehicle movements while continuing to broadcast the regional programme
- normal mode: when signal quality degrades, the radio changes transmitter depending on vehicle movements as it searches for the best signal for a broadcasting network
- mode deactivated: when signal quality degrades, the radio does not change transmitter

Press "MENU" and select "AF". The "OK" button lets you activate or deactivate the function in regional mode (REG), normal mode (ON) or deactivate the function (OFF). Once the required mode is displayed, press EXIT.

When the AF function is active in regional or normal mode, the display shows the AF symbol.

Traffic announcements (TA)

This function interrupts the current source to broadcast traffic information messages.

Note: on FM, not all stations allow their programmes to be interrupted by TA messages.

When traffic announcements are broadcast, you can interrupt them by pressing the "TA" button. This function will remain active. When traffic announcements are not being transmitted, you can activate or deactivate the function by pressing the "TA" button.

The message "TRAFFIC" is displayed when the "TA" option is activated.

News

This function interrupts the current source to broadcast information messages.

When the information is transmitted, you can interrupt it by pressing the "TA" button. You can activate or deactivate this function in the "Advanced" menu (Advanced) then "News" (News).

The message "NEWS" is displayed when this option is activated.



When the "TA / News" function is activated, the "AF" function is automatically activated.

Important public announcements

Important public announcements can be transmitted on the radio in case of serious events. "ALARM" is displayed when an important announcement is transmitted.

This function cannot be deactivated.

Programme type(PTY)

Some radio stations broadcast an identification signal at the same time as their programmes, defining the content of their programme as sport, radio drama, financial information or music genre. It is possible to do a station search by programme type. In this case, only stations broadcasting the programme type(s) defined will be selected by the radio.

The message "PTY" is displayed during the search when this option is activated.

You can activate and select one or more areas of interest in the menu using the headings "Advanced" then "PTY". Select "Delete all" to deactivate this function completely.

Note: the PTY function is not available on French broadcasting networks.

Telephone and other Bluetooth® devices

The radio can be paired with mobile phones and other Bluetooth® devices. To connect a device to the radio via Bluetooth®, please proceed as follows:

Bluetooth® devices

Activating Bluetooth® functions

- 1 - Activate the Bluetooth® function on the radio and on the device.
- 2 - Add the device.

Activate Bluetooth®

To do this, press the "MENU" button. Select "BT Settings" and "BT ON". When the Bluetooth® function is activated, the Bluetooth® icon is displayed.

Add a mobile phone or other Bluetooth® device

Add a mobile phone or other Bluetooth® device.

Up to ten different devices can be paired. Press the "MENU" button, select "BT Settings" and "Pairing".

When the radio is searching for Bluetooth® devices, the Bluetooth® icon flashes.

Depending on the type of device, a 4-digit code is displayed on the radio and should be entered on the device (old devices) or 6-digit code appears on both and you should confirm that they are identical (modern devices)



Note: the device's Bluetooth® function should be activated and the device should be detectable and/or searchable. Once the radio and the device are paired and connected, the Bluetooth® icon appears surrounded by a circle (on the instrument panel) or a second Bluetooth® icon appears on the radio.

Several devices can be connected to the radio at the same time. If more than one mobile phone is connected, only one can be used for the "hands-free" function; the other can be used as a source for streaming music.

To change the device for the hands-free function, go to "Menu", "BT Settings", then select the line "Select phone" and choose the telephone required.

To change the device used as a music source, go to "Menu", "BT Settings" then select the line "Audio device" and choose the device required.

Note: the same telephone can be used for both the hands-free function and as a music source.

The peripherals previously connected to the radio reconnect automatically (if the device allows this).

When the radio is switched off, the Bluetooth® function stops and the connection is interrupted. When the radio is switched back on, the devices will reconnect automatically.



If there are already ten paired devices, the message "PHONE LIST COMPLETE" will appear the next time you try to add a device. In this case you will first have to delete a phone.

Delete one or more devices

You can delete one or all of the paired devices. To do this, press "MENU", select "BT Settings" then "Remove". Delete one or all of the devices on the list

Calls with the Bluetooth® hands-free system

Receive, reject and end a call

- To accept a call, press the "OK" button or use the button on the steering-wheel-mounted controls.
- To end a call, press the "EXIT" button or use the button on the steering-wheel-mounted controls.
- To reject an incoming call, press the "EXIT" button.

To resume communication on the phone during a hands-free call, long press on "OK" or the button on the steering-wheel-mounted controls.

Outgoing call

You can make a call in hands-free mode via the call history or the list of contacts.

To do this, go to "MENU", "Contacts" or "call history" and scroll through the list.
To dial a number, do this directly on your mobile.



STOP

WHEN YOU ARE DRIVING, ALL YOUR ATTENTION SHOULD BE ON THE ROAD. EVEN IF THE RADIO IS ON WHILE YOU ARE DRIVING, YOUR ATTENTION SHOULD STILL BE ON THE ROAD.

BEFORE RECEIVING OR MAKING A TELEPHONE CALL, ENSURE YOU HAVE PARKED YOUR VEHICLE PROPERLY, OUT OF THE WAY OF TRAFFIC, AND ON A HARD SURFACE.

Secret mode

In this mode you can switch off the microphone during a call so the other party does not hear what you are saying in the cab; to do this, use the radio's "mute" function on the steering-wheel-mounted controls (volume and - at the same time). Repeat this action to continue the conversation.



Bluetooth® has a range of a few metres, so if you leave the vehicle, but stay close by, an incoming call will be redirected to the vehicle's loudspeakers via the hands-free mode; to prevent this and take the call on your phone, switch off the radio.

Audio settings

You can change the settings such as volume, equaliser, balance, etc.

Adjust the volume

You can increase or decrease the volume by turning the thumb wheel.

The radio switches on automatically at the same volume used before the radio was switched off. However, the volume stays within the predefined minimum and maximum limits.

To access the audio settings, press the "AUDIO" button.

Then scroll through the various settings using the up and down arrows and adjust the value using the right and left arrows.

To exit the audio settings, press "AUDIO" again or wait for approximately 10s.

Features available:

- Equalizer (classic, jazz, rock)
- bass

- midrange
- treble
- Balance (left - right)
- Fader (front - rear, available if the installation has four loudspeaker systems)

Speed-sensitive volume

The "ASC" function (Active Sound Control) adjusts the volume of the audio system to vehicle speed, to compensate for road or engine noise. This function can be set to three levels of sensitivity: low, medium and high. It can also be switched off (OFF).

On delivery the "ASC" function is deactivated.

To activate and select the sensitivity level for this function in the menu, go to "MENU" then "ASC" and confirm by pressing "OK" until the required level is reached (OFF, MIN, MED, MAX).

Auxiliary, Bluetooth® and USB

Different audio inputs

There are three different audio inputs:

- one Bluetooth® wireless input
- two physical inputs, USB and AUX.

Several devices can be connected and be detectable at the same time but the same device cannot be connected via Bluetooth and USB at the same time.

USB

USB mode

The radio is designed to work with USB devices with a memory of up to 16 GB. In some cases, other models may also work.



Insert a USB device to activate the USB mode on the radio. If the radio cannot read your USB device, please disconnect it and try again.

No special operation is required to disconnect a USB device. When a USB device is disconnected, the radio automatically switches to the old source.

A USB device must be connected and recognized for USB mode to show in the list of available sources.

In this case, the "USB" symbol is displayed on the instrument panel.



For USB devices holding a lot of data, the loading operation can take several minutes.

Telephones and other devices

Telephones and similar devices may be connected via USB in order to recharge them.

Change track, folder and fast forward or fast backward

- Briefly press the "OK >" or "< EXIT" button to play the next track or previous track respectively.

The thumb wheel on the steering-wheel-mounted controls can also be used (down for next track, up for previous track)

- Hold the "OK>" or "<EXIT" button down for fast forward or fast backward respectively.
- if the USB device contains folders, briefly press the up or down button to change folder. Button 6 on the steering-wheel-mounted controls can also be used to access the next folder.

Playback can be paused by pressing button "4 pause" or via the steering column-mounted controls (mute/pause via vol+ and vol- at the same time). To resume playback, press button "3 play" or the steering-wheel-mounted controls.

"Random playback" and "Repeat" function

- There are three different settings for repeat.
"Repeat all" to repeat all songs (default mode)
"Repeat folder" to repeat the folder
"Repeat song" to repeat the current song.
If there is no folder on the USB medium, "Repeat folder" and "Repeat all" will have the same effect.
To choose the repeat mode, use button "5". (RPT 1, RPT folder, RPT all)



- There are four different repeat settings for a USB device; random playback is associated with repeat:

- if "Repeat all" is activated, the function will be "Random all" (random playback of all songs)
- if "Repeat folder" is activated, the function will be "Random folder" (random playback of songs in the current folder)
- if "Repeat song" is activated, there is no random playback function.

To activate or deactivate the random playback function, use button "2".

The symbols for "Shuffle play" (random playback) and "repeat play" (repeat) are displayed when the functions are activated.

Playback resumes automatically as random play once all tracks have been played.

Auxiliary

Operation in auxiliary mode

Auxiliary mode

Connect the equipment to the jack socket (cable not supplied).

Press the "MEDIA" button until "AUX" is displayed on the front panel.

The volume on the auxiliary device should be set to maximum.

The volume may be adjusted via the radio thumbwheel or the Vol+ and Vol- steering column-mounted controls. The "MUTE" action may also be applied.

Note: to change track, fast forward and fast backward, go directly to the AUX device. It is possible to adjust the input volume of the "AUX" source in the radio menu: "MENU", "Advanced" then "AUX input level"

Bluetooth®

Stream music via Bluetooth®

When one or more Bluetooth® devices are connected, they can be selected for listening to music. The list of paired devices appears in the menu, under "BT Settings", then "Audio device". The device connected is indicated in the list by a " * " before and after its name. You can change the device by selecting another one from the list (if it is present close by). Only one device at a time can be connected for listening to music. As soon as it is connected, it appears in the list of sources available (access using the "Media" button or the source selection button on the steering-wheel-mounted controls).

The following functions are available:

- Briefly press the "OK >" or "< EXIT" button to play the next track or previous track respectively.
- You can also use the thumb wheel on the steering-wheel-mounted controls for this (down for the next track, up for the previous track)
- Hold the "OK>" or "<EXIT" button down for fast forward or fast backward.
- To stop current playback, briefly press button " 4 [pause symbol] " or activate the MUTE/ PAUSE function using the steering-wheel-mounted controls
- To resume playback, briefly press button " 3 [play symbol] " or deactivate the MUTE/ PAUSE function using the steering-wheel-mounted controls

Note: in media playback, the MUTE function switches off the sound without stopping playback (brief press on POWER button).

Bluetooth® out of range

When you move away from the truck with the radio working, the connection is interrupted. The connection will be re-established automatically on your return if the interruption lasts less than 10 minutes. After this, to reconnect, switch the radio off, then switch it back on. Music playback will resume from the same point when the connection is re-established (this can take up to 20s depending on the device).

Location of radio peripherals

Various physical interfaces complete your radio.

Depending on your vehicle's equipment

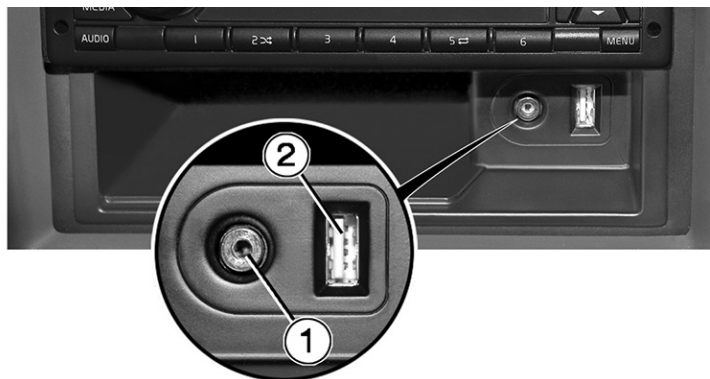
Header shelf



- (1) - Microphone

The microphone is used in the telephone hands free mode with Bluetooth functionality. Refer to the radio handbook supplied in the on-board kit.

Dashboard (central location)



- (1) - Auxiliary socket
- (2) - USB socket

The auxiliary and USB sockets are used to connect to an external source compatible with the radio or for recharging devices.

Refer to the radio handbook supplied in the on-board kit.

Telephone cradle

Telephone cradle (1) is removable, use thumbwheel (2) to reposition it by:

- rotating the thumbwheel clockwise to loosen it,
- rotating the thumbwheel anti-clockwise to tighten it.



Cab ventilation

The ventilation and air conditioning system can heat or cool the inside of the cab, as required. Thanks to the air conditioning, you can also dehumidify the ambient air in the cab and demist your windscreen quickly.

It is completely normal when using the air conditioning to see condensation water running under the vehicle.

STOP

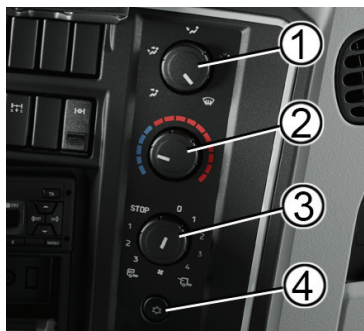
DEVELOPMENTS IN THERMAL AND ACOUSTIC COMFORT HAVE RESULTED IN VERY EFFECTIVE SEALING OF CABS. IT IS THEREFORE NECESSARY TO ENSURE SUFFICIENT VENTILATION (PARTLY-OPENED WINDOWS, ROOF VENTILATION HATCH) TO PREVENT AIR FROM BEING TRAPPED DURING LONG PERIODS INSIDE THE CAB.

Heating, air conditioning and ventilation

1. Cab air distribution control.
2. Temperature selector.
3. Ventilation control.
4. Air conditioning control.



In order to limit the risks of leaks following an extended stop, it is recommended to operate the air conditioning at least once a week for a few minutes.



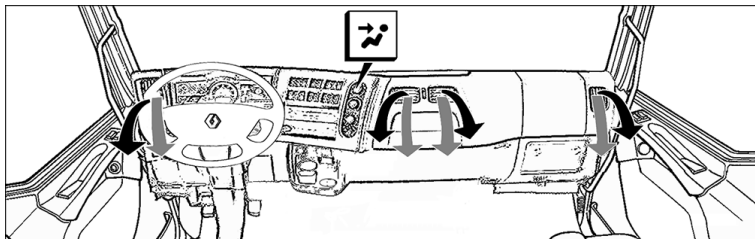
Air distribution control

Depending on the position chosen, the control distributes the air to the various output ports.

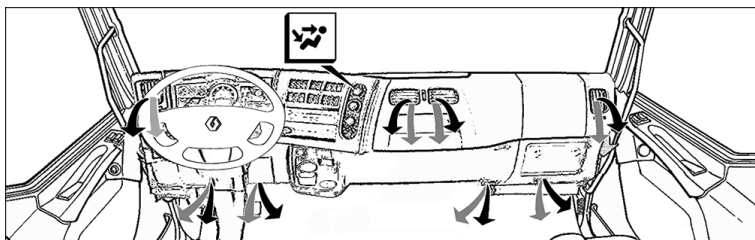
In combination with the temperature selector and the ventilation control, it optimises the temperature according to the positioning of these outlets.



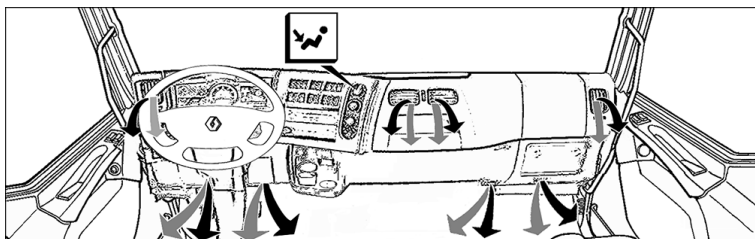
Position 1: air directed upwards (vents on dashboard).



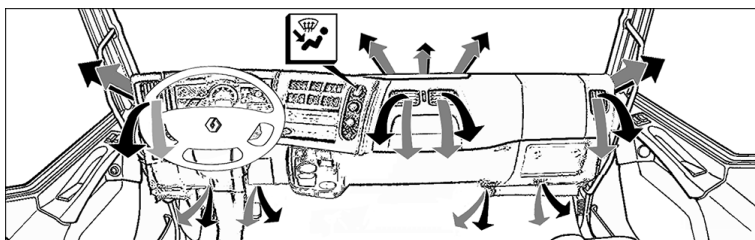
Position 2: air directed upwards (vents on dashboard) and to the lower vents (in footwells).



Position 3: air directed to the lower vents (in footwells) and slight flow upwards (vents on dashboard).

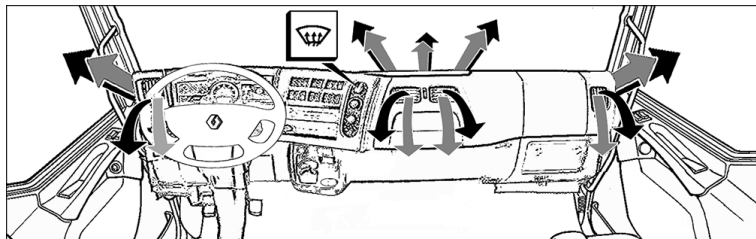


Position 4: air directed to the lower vents (in footwells), upwards (windscreen and side windows) and to dashboard.



Position 5: air directed upwards (windscreen and side windows) and to dashboard air vents.

Ventilation - Cab temperature management



When the side and central vents are open, the air flow is distributed between the various ports selected by each position of the control.

Ventilation control

This control has two functions:

Exterior air ventilation function

Turn the control to the right.

- STOP position: stop (air intake closes).
- Position 0: stop (air intake opens slightly).
- Position 1 to 4: fan control (from 1st gear to 4th gear).



Interior air ventilation function (recycling)

Turn the control to the left.

- STOP position: stop (air intake closes).
- Position 1 to 3: fan control (from 1st gear to 3rd gear).

Recycling is used to:

to avoid breathing in contaminated air from outside (road tunnel, polluted area, etc.) or to obtain maximum cooling or heating power.



The recycling function must only be used momentarily

Air conditioning control (6)

With the engine running, move the ventilation control to at least position 1, then press the air conditioning control to run the air conditioning system

A built-in warning light illuminates when the air conditioning function is activated.

Set the temperature selector to the required temperature.



If the vehicle is left standing for more than a week, activate the air conditioning, with the engine running and at idling speed.

Temperature selector

Position the temperature selector according to the required temperature.

- blue zone: cold.
- blue/red zone: temperate.
- red zone: hot

Once the required adjustment has been made, wait a few moments to check the result before modifying it slightly if necessary.



Rapid de-icing (warm hold function)

This device accelerates the de-icing function.

After a variable time-delay depending on ambient temperature and engine temperature, this device keeps the engine at the idling speed obtaining at the time and actuates the exhaust retarder to provide a rapid temperature rise in the cooling circuit.

Conditions enabling the warm hold function

- ambient temperature below 5°C,
- engine coolant temperature below 70°C.,
- vehicle speed less than 3 km/h,
- no power take-off active.

Conditions overriding the warm hold function

- ambient temperature above 5°C,
- coolant temperature above 70°C,
- vehicle speed above 3 km/h,
- a power take-off engaged,
- change from (N) (neutral) to (D) on the gearbox control.



If the parking brake is not applied, the warm hold function can only be activated after a delay of 150 seconds.

Use in cold weather

De-icing/demisting

- Close the side and central vents.
- Position the ventilation control on "0" (external air side).
- Position the air distribution control on "de-icing/demisting".
- Position the temperature selector on "hot".

As soon as the temperature increases:

- Position the ventilation control on "1".
- Press the air conditioning control.
- Increase the air flow as the engine temperature rises.

Once the "de-icing/demisting" action is complete, position the temperature selector in the required zone. Reaction time varies depending on the position chosen. Maintain a minimum air flow for better efficiency.

Use in hot weather

If the temperature inside the cab is greater than the outside temperature:

- Ventilate the cab by driving for a few minutes with the windows down.
- Position the temperature selector on maximum cold and the ventilation control on "4" to obtain a maximum air flow.
- Press the air conditioning control.

Once the required comfort has been obtained:

- Move the temperature selector to a more moderate position.
- Choose the position of the air distribution control.
- Reduce ventilation. Maintain a minimum air flow for better efficiency (on "1" at least).

If you wish to increase the heating or cooling power, use the cab air recirculation with the air conditioning engaged. This recirculation should only be momentary.

Air vents

Open flow

Turn thumb wheel (1) to the left.

Close flow

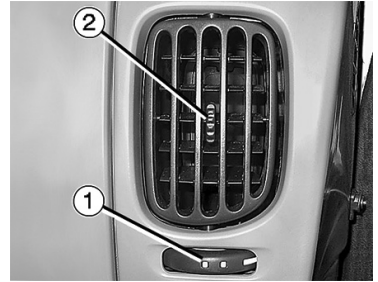
Turn thumb wheel (1) to the right.

Horizontal orientation

Swivel the vent.

Vertical orientation

Use control (2).



Central air vents

Located in the centre of the dashboard.

Open flow

Turn thumb wheel (1) up.

Close flow

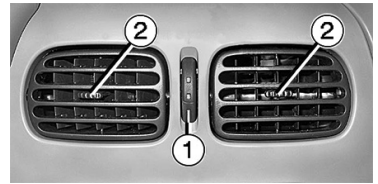
Turn thumb wheel (1) down.

Horizontal orientation

Use control (2).

Vertical orientation

Swivel the vent.





Safety

Seat belts

In the event of an accident, your seat belt can save your life, and your passenger's life. It must be fastened before the vehicle moves.

The highway code states that you must always wear a seat belt on board a motor vehicle, regardless of where you are sitting.

Always wear your seat belt when you are driving! An alarm will sound a symbol will be displayed on the instrument panel as a reminder to wear your seatbelt, if necessary.

Driver and passenger seats

Seat belts with automatic inertia reel

Unroll the strap slowly to engage tongue (1) in buckle (2). If it jams, thread the belt back slightly the unroll again.



Warning pictogram (S) on the instrument panel informs you that the seat belt is not fastened.



Unlocking

Press button (3) on casing (4), the belt is wound in by the inertia reel. Keep hold of buckle (1) to make this operation easier.





For your own safety, wear your seat belt for all journeys.

Before starting: first adjust your driving position then adjust your seat belt correctly.



NEVER PASS THE HARNESS BELT UNDERNEATH YOUR ARMS OR BEHIND YOUR BACK.

Child safety

The use of a baby and child restraint is a legislative requirement.

In Europe, children under 12 years of age, of a height less than 1.50 metres and a weight below 36 kilograms, must be secured with a type-approved device suitable for the weight and size of the child.

The driver is responsible for ensuring that this device is used correctly.

We recommend that you select a type-approved device that is compliant with the European ECE 44 regulation.



The legislation in effect in the country in which the vehicle is being driven must be abided by. They may differ from those mentioned here.



BABIES AND CHILDREN MUST NEVER BE TRANSPORTED ON THE LAP OF VEHICLE OCCUPANTS.

NEVER USE A SINGLE BELT TO SECURE TWO PEOPLE.

Before installing a child seat in the front (if the installation is authorized)

When the passenger seat is so fitted, proceed to make the following adjustments:

- move the passenger seat back as far as it will go;
- straighten the backrest so it is as vertical as possible;
- lower the seat base as far as possible;
- raise the headrest as far as possible;
- place the seat belt height control in low position.

Fire extinguisher

A fire extinguisher (1) is located near to the driving position. Its location varies depending on its capacity.

This equipment is governed by legislation. It must be inspected and tested regularly by an approved body.



Safety equipment built into the vehicle

Safety equipment is built into the vehicle

- A protection valve controls the gas flow from each tank and prevents the gas escaping if a gas line breaks.
- Overpressure valves release the gas if the pressure in the tanks becomes too high.
- A safety switch is engaged and cuts off the gas circuit in the event of a collision.
- The shut-off valve on each tank isolates the gas in the corresponding tank.
- Fuel filler flap open warning: a warning light illuminates on the instrument panel and prohibits start-up.
- A thermal fuse releases the gas if the temperature near the tank valves becomes too high.

Preventive safety measures

- In the event of a gas leak, contact the nearest RENAULT TRUCKS service point.
- Leave the vehicle outside.
- Servicing and maintenance of the CNG system must be carried out by qualified personnel specially trained in handling natural gas. This also applies to other servicing procedures requiring the removal of components from the CNG circuit.

It is strictly forbidden to:

- Smoke in the filling station or its vicinity.
- Generate naked flames (welding or cutting torch) within 10 metres of the vehicle.
- Work in a workshop without a roof-mounted extractor, correctly functioning ventilation device, or where there are uncontrolled potential sources of ignition.



For all work on the CNG circuit, contact a RENAULT TRUCKS service point.



The tank and gas circuit support framework (pipework, unions and devices) require spare parts validated by the manufacturer. These references are integral parts of the approval label. The use of any non-genuine parts will void this approval label and may prove to be dangerous in use.

In the event of an accident

- If possible, switch off the ignition for safety reasons.
- If no damage has occurred, then no action is required.
- If the safety switch has tripped, a message is displayed on the instrument panel until it is rearmed.

In the event of fire or risk of fire

- If possible, switch off the ignition for safety reasons.
- Evacuate the area around the vehicle, then keep a safe distance.
- Contact the emergency services and warn them that the tank contains gas (CNG).

Devices to detect other road users

To reinforce safety, your vehicle is fitted with a smart camera and a radar that constantly analyse the condition of the roadway and the traffic in front of you.

Although these systems are very advanced, they have a certain limitations that could catch you out if you are not on your guard.

The system may have problems identifying and handling certain situations.

Always be careful while driving.

Be aware of traffic conditions and be ready to apply the brakes at all times.



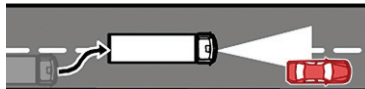
After a collision or minor impact around the sensor zone, contact a RENAULT TRUCKS service point to check that the operation and settings of the sensors are correct.

- The system has a limited ability to detect:
 - Motorcycles and other small road users
 - Vehicles with unusual shapes, such as boat trailers
 - Vehicles in poor visibility conditions, with strong reflected light or bright lights from oncoming traffic, or reflections from wet roads
 - Vehicles in poor weather conditions, such as fog, heavy rain or clouds of snow from other vehicles

The system cannot detect obstacles or stopped vehicles ahead of the vehicle in front of the truck. The vehicle may brake or accelerate unexpectedly or display unnecessary warnings.



When passing, the system may unexpectedly issue a warning or brake the truck if you are driving too close to the vehicle you wish to pass and you are on the same path.



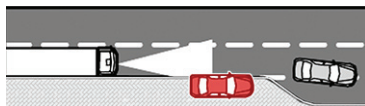
The system has a limited ability to detect whether the vehicle in front of you is leaving the road or moving in another direction. The vehicle may brake unexpectedly or display unnecessary warnings.



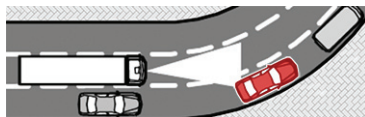
The system has a limited ability to detect vehicles that are decelerating close to your truck, becoming too close for the system to detect. Brake to increase the distance between your truck and the vehicle in front of you.



The system has a limited ability to detect stopped vehicles or vehicles whose trajectory is slightly different. The vehicle may brake or accelerate unexpectedly or display unnecessary warnings.



The system has a limited ability to detect vehicles that are around a bend. The vehicle may brake or accelerate unexpectedly or display unnecessary warnings.



The system accounts for stationary vehicles as well as vehicles travelling in the same direction in the same lane. It does not account for vehicles crossing the lane or coming from the opposite direction. Additionally, the system does not account for animals, pedestrians or bicycles.



The list provided here is for informational purposes only, and does not depict all situations that may interfere with the system. You should be in constant control of your speed and adjust it according to the profile and condition of the road surface, traffic difficulties, foreseeable obstacles and the legal speed limitations in effect. Relying entirely on the AEBS may put you in dangerous situations that can cause important material damages, serious injury or death.

Area in front of radar where no equipment should be mounted



Never paint, apply adhesive tape or fit anything in front of the radar (e.g. additional headlamp, registration plate, marker plate bracket, bodybuilder equipment, etc.). This could cause sensor failure, making it impossible to guarantee correct system operation.

The radar beam must not be obstructed. All types of equipment (tools, snow blade, accessories, etc.) added in this area will cause malfunctions of the FLS radar and its associated functions.

If in doubt, contact your Renault Trucks dealership.



A message "**CLEAN CAMERA - REDUCED SAFETY FUNCTION**" and its associated icon appear on the multifunction display (4). Clean the area in front of the camera shown in the illustration (in case of snow, ice, dust, etc).

If the anomaly persists after cleaning, contact a RENAULT TRUCKS garage.



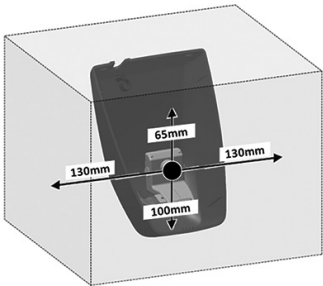


Area in front of the camera where no equipment should be installed



Vehicles equipped with a LPOS camera are subject to restrictions regarding the upper section of the windscreen.

No equipment must be installed or intrude in front of the radar, or 130 mm on either side of, or 65 mm above and 100 mm below the LPOS camera.

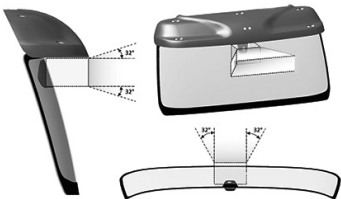


Camera's field of vision where no equipment should be installed



The camera's field of vision must not be obstructed either. Any equipment positioned in this area could interfere with the camera and associated functions.

- It is not permitted to modify the position of the camera
- Do not cover, paint or attach stickers in front of the camera or in its field of vision



European Union Declaration of Conformity for radar

SIMPLIFIED EU DECLARATION OF CONFORMITY	By this document, APTIV, 42367 Wuppertal declares that the VMRR2 device complies with the essential requirements and other applicable provisions of directive 2014/53/EU (RED). The original declaration of conformity can be found at www.aptiv.com/automotive-homologation .
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	Frequency band(s) in which the radio equipment operates: 76–77 GHz
	Maximum radio-frequency power transmitted in the frequency band(s) in which the radio equipment operates: 25 dBm (316 mW)



Vehicle operating instructions

Running-in

During the running-in period (approximately 5,000 km), only operate the engine at full engine speed over short distances. Do not run the engine at speeds that are too high or too low. Monitor the coolant temperature and oil level carefully.

The vehicle should be laden the same as for normal use.

Use during winter or in cold countries

Weather conditions have a significant impact on the use of your vehicle. To guarantee its performance and reliability, irrespective of conditions, follow the recommendations below.

Starting the engine

See chapter **Driving**.

Before setting off, allow the engine to idle for a few seconds to ensure that the oil is circulating. There is no need to leave the engine warming up for too long; start off at low speed using a range of sufficiently-low gears. Never request maximum engine performance until the temperature has reached 80°C.



INSTALLING A RADIATOR SHROUD OR RADIATOR GRILLE COVER PLATE IS ABSOLUTELY PROHIBITED ON COOLED TURBOCHARGED ENGINES. THIS ACCESSORY PREVENTS THE COOLING OF THE AIR FROM THE TURBOCHARGER AND THEREFORE IMPACTS ON ENGINE POWER AND PERFORMANCE.

Engine cooling circuit

This vehicle is supplied with "ULTRACOOLING PLUS" coolant (Renault Trucks Oils product) in compliance with RENAULT TRUCKS specifications. Depending on its country of use, it provides protection against freezing down to -25°C or -35°C.

Battery banks

Keep the batteries fully charged since their resistance to frost depends on their state of charge.

Activation by low temperature

Follow the instruction below:

- in external temperatures below - 20°C, let the engine run for 10 minutes to reach gearbox operating temperature.

Use during summer or in hot countries

Check battery fluid level frequently. Do not labour the engine, shift gear as often as necessary to keep the engine running at an optimum speed. Coolant circulation will be

activated and the temperature will be maintained within the operating norms. Clean the radiator fins frequently, where insects and dirt can obstruct air circulation, by blowing through from the rear side with compressed air. Ensure that the radiator is in perfect condition; descale it if necessary.

Use in dusty environments

It is recommended to inspect the air filter clogging indicator carefully every day.

Air filter

Refer to **Workshop maintenance manual**.

Do not forget that clogging of the air filter is a function of engine speed, it follows that in use low gear ratios must be used (mountainous routes). Take time into account rather than the distance covered.

A clogged filter may cause serious faults.

Use at high altitudes

Using the vehicle at certain altitudes has an impact on engine performance. The reduction in power output is approximately 10% for naturally-aspirated engines and approximately 5% for turbocharged engines, for each 1,000 m of altitude. Furthermore, take into account that the boiling point of water is reduced by 3.5°C per 1,000 m of altitude.

Turbocharger

Turbocharger faults

Incorrect operation of the turbocharger is noticeable through a lack of engine power output, unusual noise, oil present in the intake manifold or unusual smoke from the exhaust.

In this case, visit the nearest RENAULT TRUCKS garage. No internal work should be performed on the turbocharger.



Installation of one or more heat shields on the turbocharger is essential to prevent any risk of vehicle fire or damage to the surrounding components.



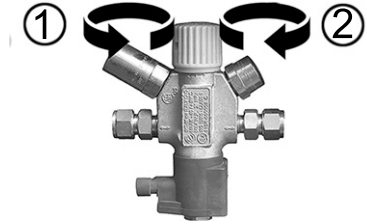
Any operation on the exhaust pipe or its mountings requires tightening to torque. Contact a RENAULT TRUCKS garage.

Shut-off valves and collision sensor

To improve your CNG vehicle's safety and maintainability, it is fitted with shut-off valves and a collision sensor.

Shut-off valves

A shut-off valve is mounted on each tank in order to isolate it in the event of an impact or a leak. To close the supply to a tank circuit, screw in the valve clockwise in the direction of the arrows shown on the yellow knob.



1. Open position.
2. Closed position.

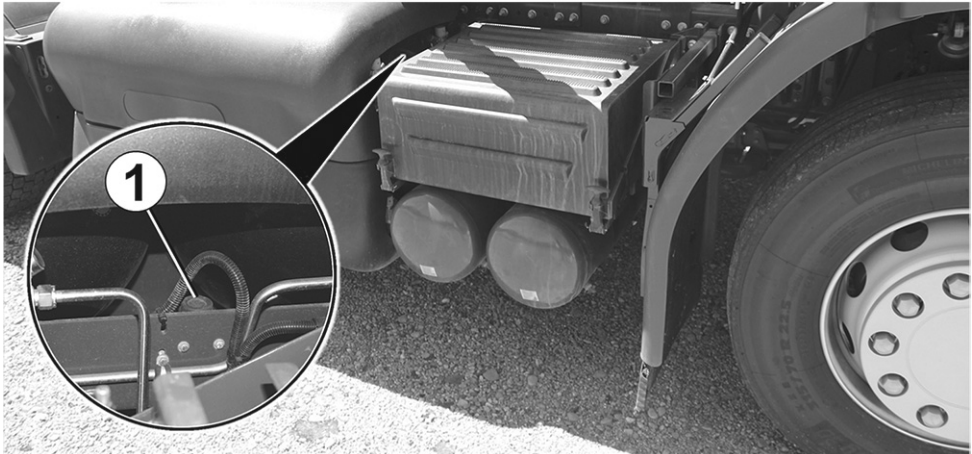


You are reminded that the tank manual shut-off valves should always be kept open during the vehicle operating and parking times.

They should be only be opened or closed during use or for maintenance reasons.

Shock sensor

Vehicles running on CNG are fitted with a shock detector. This detector engages in the event of an accident and immediately closes all the gas tanks and stops the engine. A sudden vehicle manoeuvre may also cause it to engage. In this case, reset the shock sensor (1) by exerting pressure on the top.



Parking the vehicle

As with driving, you should always take care when parking the vehicle so as not to endanger other road users, and also to avoid damaging your vehicle.

Short stays (less than ten days)

Make sure that the vehicle is correctly parked (no risk of disturbing the traffic or safety risk for traffic, persons or surrounding facilities, following the highway code).

Avoid parking the vehicle near bends, road junctions or traffic signs where it may obstruct visibility or startle other road users.

Ensure that all electrical systems are switched off or unplugged.

Turn the main power switch to avoid discharging the batteries.

Parking for less than 30 days

Secure the vehicle without using the parking brake (to prevent the linings from sticking). To do this, immobilise the wheels of the vehicle and regularly check the vehicle's stability.

Raise and protect the wiper blades. Make sure you protect the windscreen to avoid damage in the event that the wiper blades suddenly fold down.

Protect plastic, rubber and glass parts from the effects of UV radiation.

Fill the fuel tank to prevent condensation forming.

Ensure the tyre reach is changed regularly (to avoid any flattening of the tyre tread).

Once a week:

Check that there are no traces of oil, coolant or fuel leaks under the vehicle.

Check levels: engine oil, power steering, etc.

Start the engine and run it until the air pressure light goes out. Monitor the indications shown on the display.

Parking for over 30 days

Check the condition of the tyres, including the spare (pressure, impact marks or cracks in the sidewalls, etc).

Check that the air intake vents are not blocked.

Check and if necessary recharge the batteries.

Start the engine and leave it running until the air pressure light goes out. Monitor the indications shown on the display.

Check that all the accessories are functioning properly (air conditioning, heating, windscreen wipers, front/rear signals).

- Move the vehicle:

- 5 to 10 km at a moderate speed allowing the components to warm up as normal. When stopped, check for leaks (hubs, axle head, etc).

- 15 to 20 km at normal speed, up to the maximum speed of the vehicle (while respecting the highway code) to check the behaviour of the vehicle, gear shifting, while taking note of any abnormal noises.

After the checks, if you park the vehicle again, apply the above advice and ensure that the tyres are changed.

Check the lubricating points (hinges, locks, suspension, etc). If necessary, re-lubricate.

In the event of prolonged vehicle immobilisation, the batteries should be regularly monitored - at least every 4 weeks.

If the charge is below the minimum recommended level, you will have to recharge each battery.

If the vehicle is used in when stationary, without starting the engine, pay attention to the power consumption caused by the equipment (tachograph, GPS, radios, etc). More frequent checks will become necessary in this instance.



Driving advice

Economic driving

Eco-driving is a responsible driving behaviour that reduces fuel consumption, reduces wear and tear on your vehicle, lessens driver stress and fatigue, and reduces the risk of accidents.

Always bear in mind that energy efficiency should never come before road safety.

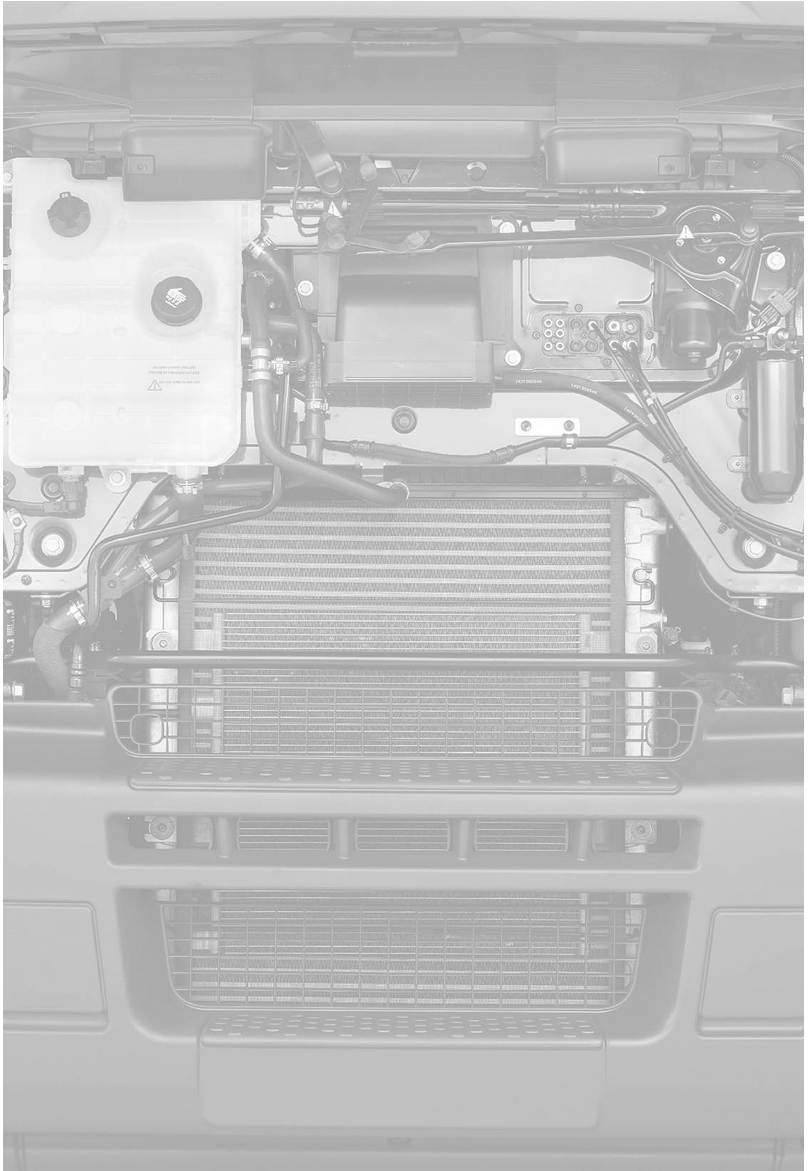
Some tips to reduce fuel consumption and wear and tear on your vehicle:

- Prepare your journey in advance and check the pressure and condition of your tyres. Never forget that poor tyre pressure or high tyre wear leads to extra fuel consumption, poorer handling, increased tyre wear and the risk of bursting or tearing.
- Make sure the vehicle is in good condition. A poorly maintained vehicle can lead to a significant increase in fuel consumption.
- Adopt a flexible driving style. Start smoothly and shift up immediately to avoid over-revving, which leads to higher fuel consumption. Anticipate the need to slow down: use the engine brake rather than the brake pedal. A need to brake indicates that the speed the vehicle had been travelling at excessive speed. This naturally means you have used fuel to reach this speed unnecessarily. Brakes generate heat, and therefore energy. The energy source for your vehicle is fuel. The act of braking leads to fuel consumption.
- Keep your speed constant to avoid using the brakes and wasting fuel unnecessarily. Reduce your speed further. Reducing speed by 10 km/h on the motorway adds a matter of minutes to your journey, but saves litres of fuel.
- In urban environments, GPS data has proven that aggressive driving (strong acceleration and braking, running amber and even red lights, etc.) does not save time. Driver stress, wear and tear on the vehicle, danger to other road users and fuel consumption, however, all increase considerably.
- Switch off the engine if you are going to stop for lengthy periods. Stopping and restarting a vehicle uses less fuel than idling for more than 20 seconds.
- Think before using vehicle accessories. Without energy, there is no source of electricity. The only energy on board a vehicle is fuel. So the more accessories you use (air conditioning, radio, etc), the more energy you will use. Some of these accessories, such as lights, are a safety requirement of the Highway Code. But it is possible to reduce the use of air conditioning without causing any discomfort.

To obtain the best performance using your gearbox, and in particular reduced fuel consumption, adhere to the following rules for driving:

- always select the gear ratio range that allows you to use the engine at its most efficient speed. It is within this range that the maximum torque is found, offering the lowest fuel consumption,
- when selecting manual gears, choose the gear depending on the topography of your route,
- remember that **any gear shift will result in increased fuel consumption.**

Anticipate slowing down as much as possible and avoid sudden gear changes on the vehicle.



Daily checks

Daily checks

To avoid any risk of having to stop on route, or causing damage to vehicles that bring about critical faults, we recommend performing the following checks systematically.

Before getting into the vehicle



Before carrying out any checks and with the aim of preventing false level readings, ensure that the vehicle is positioned on flat ground.

In particular, check:

- If there is no trace of oil, coolant or any sign of a gas leak.
- The fluid levels for:
 - the engine
 - power-assisted steering
- The coolant level.
- Air filter clogging indicator.
- The screen wash reservoir level.
- The tyre condition and pressure.
- The condition of the rear-view mirror glass.
- The condition of the lights.
- Cab locking.
- Sealing of the components. In the event of a leak, clean the breather pipe. A blocked breather pipe generates pressure inside the crank case and causes leaks.

Tyres

Tyre pressures.

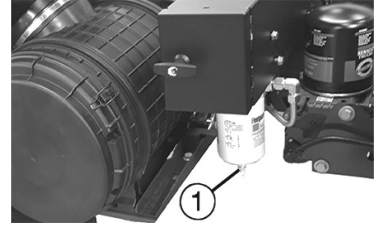
Refer to the **Maintenance and servicing** section.

Gas filter



Before carrying out the operation, check to make sure that the area is thoroughly clean. The manoeuvres below should be carried out with caution; no smoking and no use of mobile phones.

Before setting off and whenever necessary, turn the screw (1) to evacuate any water and dirt that can cause damage to the system. Once completed, turn the screw (1) in the other direction to seal the system.



- Check that no gas is leaking, which can be noticed by a hissing sound and heavy white frost in the leakage area.
- Check that all the shut-off valves are open.

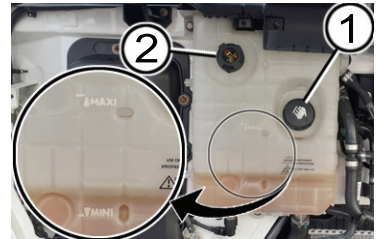


Do not drive or refuel a vehicle that is leaking gas.

Coolant level

Check the engine coolant level through the transparent wall of the expansion chamber.

When cold, the level must be between the "Min" and "Max" marks; top up if necessary.



THE "PRESSURE-VACUUM" PLUG (2) IS A TARED PLUG TO MAINTAIN A SAFE PRESSURE IN THE COOLING SYSTEM. IT SHOULD NOT BE MOVED.

REMOVE THE FILLER CAP (1) TO TOP UP. CAUTION: NEVER OPEN THIS CAP WHEN THE ENGINE IS HOT, AS LIQUID MAY SPLASH OUT AND CAUSE SERIOUS BURNS.

USE ONLY COOLANT RECOMMENDED BY RENAULT TRUCKS.

Engine oil level check

Daily checks



Always check the level on horizontal ground, 2 hours after stopping the engine.

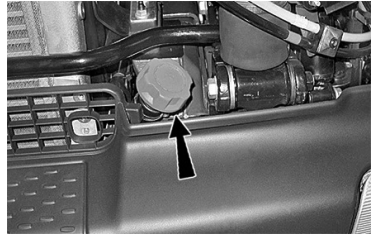
Tilt the cab.

Refer to the **Cab tilting** section.

Check the oil level using dipstick.

Top up the level if necessary.

You may now top up the engine oil level from the front.

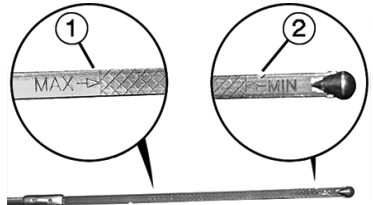


Reading the oil dipstick:

1. Maximum level
2. Minimum level



The quantity of engine oil between the minimum and maximum levels is approximately 4 litres.



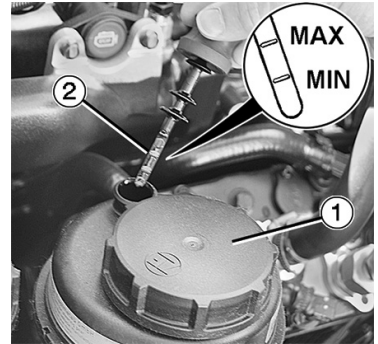
Steering fluid level

Tilt the cab.

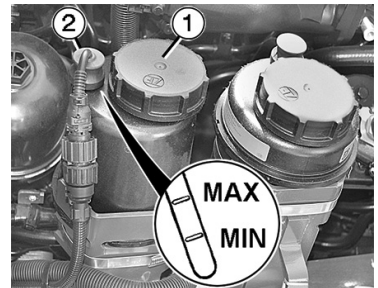
Refer to the **Cab tilting** section.

Check the steering fluid level (2).

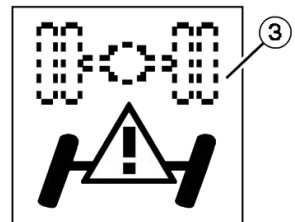
Top up the level if necessary via filler cap (1).



Vehicles equipped with a rear steering axle may have an independent steering reservoir. This is equipped with an oil level sensor (2).



If there is insufficient oil, pictogram (3) appears on the multifunction information display. If necessary, top up the level via filler port (1).

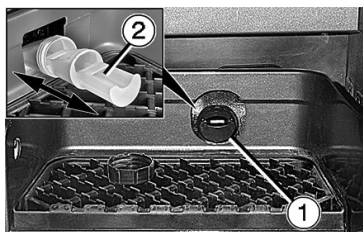


Screen wash level

Daily checks

Check the level in reservoir (1) regularly. Top up if necessary. To avoid lime scale formation and the blockage of the pipes, it you are recommended to add screen wash additive (RENAULT TRUCKS). This product also works as an anti-freeze agent. It can be maintained throughout the year.

To top up the level, fold back filler duct (2).



Always make sure the washer fluid reservoir is full before driving off. Impaired visibility can be a severe traffic hazard.

Screen wash volume

9 Litres.

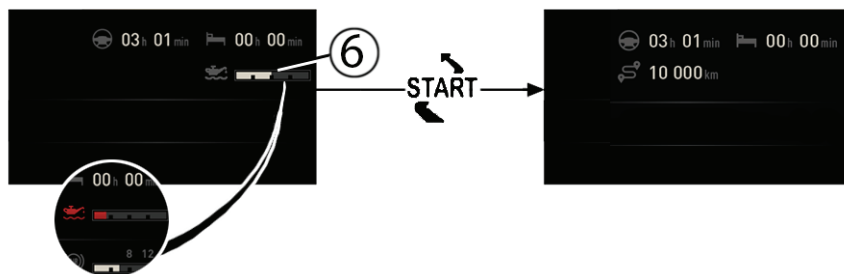
Engine oil level gauge

The level should be read on level ground after the engine has been stopped for a prolonged period.

When the ignition is switched on:

The oil level is shown in (6) before starting the engine.

If the level is too low, it will appear in red.



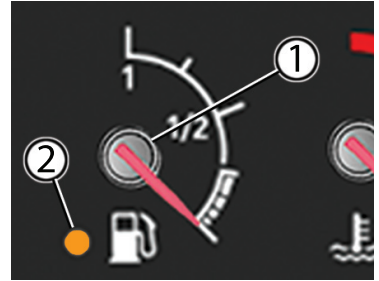
If the oil level indicator is faulty, the level check is not available and the additional driving information is displayed when the ignition is switched on.

Check the level on the gauge and go to the nearest RENAULT TRUCKS garage.

Fuel level indicator

Indicator (1) informs you of the fuel level. When the gauge reaches the low level, the reserve indicator (2) illuminates.

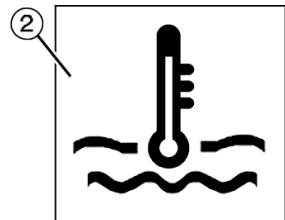
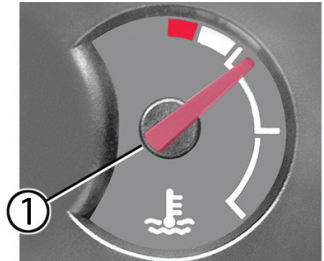
Refuel as soon as possible.



Coolant temperature indicator

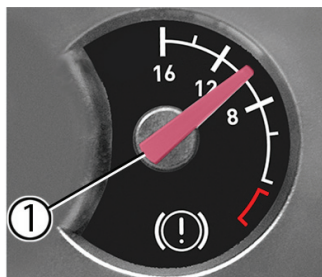
Monitor coolant temperature indicator (1); the temperature should be around 80/100°C. If coolant temperature pictogram (2) is displayed, stop the vehicle and check coolant visually.

In normal driving, the needle should stay below the red zone.



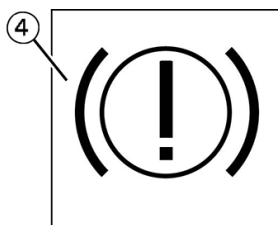
Air pressure indicator in braking circuit

Indicator (1) provides information about the air pressure in the braking circuit.



When driving, if air pressure warning pictogram (4) appears on the multifunction information display and the STOP warning light illuminates, you must stop the vehicle and contact the nearest RENAULT TRUCKS garage.

After a prolonged stop, it is possible for the air pressure to drop below a limit not allowing the vehicle to set off, start the vehicle to pressurize the air circuit so that warning pictogram (4) is extinguished.



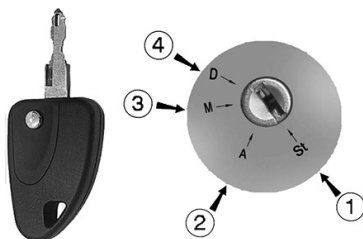


Start-up and driving

Ignition switch

Immobiliser switch:

- "Engine off and immobiliser" position (1): remove the key and turn the steering wheel until the click of the steering lock can be heard.
- "Comfort accessories feed" position (2): engine stopped, steering not locked.
- "Ignition" position (3).
- "Start" position (4).



To stop the engine, turn from position (3) to position (1).

If the key remains locked, do not force it; contact the nearest RENAULT TRUCKS garage.

Display test

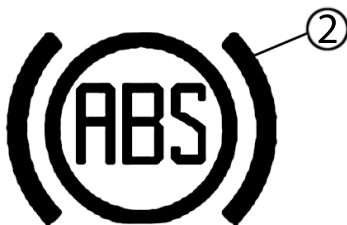
When the ignition is switched on, a self-test takes place for 3 → 4 seconds. This test checks all the instrument panel indicators for correct operation.

After the display test, pictogram (1) remains illuminated for a few seconds then goes out.



Statutory test display

The warning light for the function that requires checking, (2) (vehicle fitted with an "ABS" braking system) comes on for about 3 seconds in the lower part of the display.



Fault(s) display

In the event of a fault or faults, one or more tell-tales appear on the multifunction information display. In this case, the warning pictogram **"Service"** or **"STOP"** lights up simultaneously to indicate how serious the fault or faults are.

When a fault is detected, an icon will be displayed, accompanied by a text explaining the nature of the problem (and possibly how to resolve it) on the central part of the display.

An icon will be displayed in the lower right corner of the display.

The colour of the icon will depend on the severity of the problem: red for critical defects (4), orange for significant defects (5) and white for advisory issues (6).



If more than one fault and advisory notices occur simultaneously, only one icon will appear. It will use the colour representing the most important information.

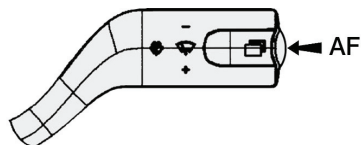
A warning light will be shown in the upper part of the display at the same time as the fault icon:

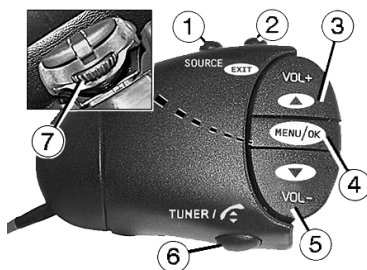
- The information warning light (7) means that a new message has appeared on the multifunction display,
- The STOP light (8) requires the driver to stop immediately,
- The service warning light(9) means you should go to the nearest RENAULT TRUCKS garage.



You can clear a fault by:

- pressing control (AF),
- pressing remote control "EXIT" button (2).





A fault associated with the **"STOP"** indicator can only be recorded temporarily.

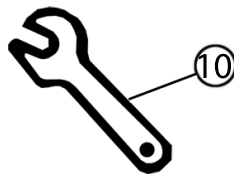


*If various faults are present ("**Service**" and "**STOP**"), only the "**STOP**" indicator illuminates.*

Maintenance display

The maintenance icon (10) may come on in 2 possible scenarios:

- as a pre-warning, along with the **"Information"** light, until the engine is started,
- as a warning, along with the **"Service"** warning light. In this case, please refer to the maintenance menu (see the **Multifunction information display** section) and go to the nearest RENAULT TRUCKS garage for a maintenance service.



A text appears on the display next to the icon to show the relevant maintenance level.

Following an alert, look up the component in question in the maintenance menu on the multifunction information display.

Main menu => Experts => Maintenance.

Depending on the component concerned, you may be able to reset the maintenance schedule.

If you are unsure about any message or icon that come on the display, please ask at a RENAULT TRUCKS garage.

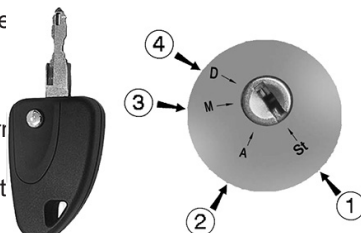
Engine start-up

When you start up your engine, it is important to follow the procedure described below to avoid any risks of damaging your batteries, the starter motor and even your engine.

The key is inserted in position 1, corresponding to vehicle

Turn the key to:

- put the truck in accessory mode (position 2),
- put the truck in ignition mode (position 3), the warning dashboard instruments are activated,
- to start, wait for the instrument panel warning light off,
- launch the truck start-up process (position 4). This position should only be maintained until the engine has started.



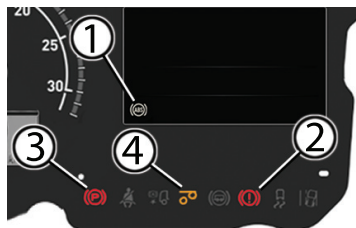
1. Ensure that the parking brake is engaged.
2. Activate the electric power supply via the battery cut-out located on the outside.
3. Visually check the condition of the gas tanks.
4. Ensure that the gearbox is in neutral.
5. Switch on the ignition and wait for the indicator lights to extinguish; switching it on too quickly will be ineffective.
6. Check the gas level on the display gauge.
7. Without accelerating, operate the starter until the engine starts up. The start-up time can be longer with a Diesel engine.
8. If it does not start:
 - Switch off the ignition with the key for 5 seconds.
 - Repeat the procedure from point 5.



The use of "Start pilote" type products (ether) for starting the engine is strictly forbidden (serious risk of spontaneous combustion or explosion).

Do not set off until:

- The brake air pressure warning icon (1) disappears, the brake air pressure warning light (2) goes out and the braking functions are operative.
- By setting the parking brake to the road position, warning pictogram (3) goes out.



If the vehicle is fitted with a lift axle, warning pictogram (4) remains illuminated when the axle is raised.

Check that there is no fault warning pictogram displayed on the multifunction information display.

Symbol "N" (1) indicates that the gearbox is in the neutral position.

Engine starting with "electronic starter" function

Depending on your vehicle's equipment

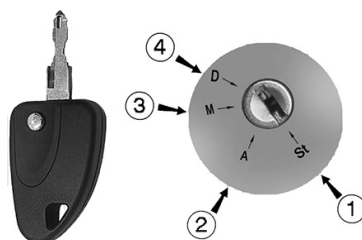
The key is inserted in position 1, corresponding to vehicle off mode.

Turn the key to:

- put the truck in accessory mode (position 2),
- put the truck in ignition mode (position 3), the warning lights come on and the dashboard instruments are activated,
- to start, wait for the instrument panel warning lights and instrument lighting to switch off,
- launch the truck start-up process (position 4). This position should only be maintained until the engine has started.

Normal use:

Without accelerating, turn and hold the key in position (4) so that the starter motor turns over the engine.
Release the key in position (3) when the engine starts.



However, if the starter motor drive phase is interrupted before starting the engine and we want to reactivate the starter motor immediately, pictogram (6) and associated message (5) appear on the multifunction information display asking you to wait. In this case, hold the key in position (4) for three seconds so that the starter motor turns over the engine again. Release the key in position (3) when the engine starts.



Prolonged use:

The "electronic starter" function has an operating logic to prevent the starter motor overheating and thus preventing it being damaged.

The starter motor can turn over the engine for 10 seconds, followed by an inactive phase of 3 seconds. The symbol (6) and a message (5) will appear on the multifunction display for these 3 seconds. This cycle may be repeated 4 or 5 times in succession by releasing the key to position (3) each time. After 4 or 5 cycles, the starter motor enters overheating protection mode.

The symbol (6) and a message (5) will appear on the multifunction display informing you that a thermal safety mechanism is in operation on the starter.

A countdown timer is displayed during which time you will be unable to restart the starter.

Once the countdown has ended, 2 more cycles can be run before the starter reverts to thermal safety status and the above sequence is repeated.

Limp home



Using the starter motor for a "limp home" function is only authorised in situations of danger (immobilisation on level crossings, etc.). To do this, turn the ignition key 3 times in less than 2.5 seconds from position (3) to position (4). This operation is stored in the memory and can be viewed using the RENAULT TRUCKS test tool.

Display messages

If the engine does not start when the starter motor is actuated by the ignition key, the instrument panel display may show fault codes. The same applies if the engine stalls. These faults indicate that the mandatory safety devices have been implemented. They can prevent the engine from being started again. To reinitialise the safety management system and clear these displays and overrides, switch off the ignition completely with the starter key then wait 5 seconds.

Engine idle adjustment device

This device adjusts idling speed within a range between 550 and 800 rpm.

Use

With the vehicle stopped, parking brake engaged and engine idling, press the "O" on the steering wheel control 3 times in less than 2 seconds, then set the new idle power:

- press "+" on the steering wheel control to increase the engine speed,
- press "-" on the steering wheel control to reduce the engine speed.



Press and hold to adjust idling progressively.

Once the idle power has been set, press and release the clutch or brake pedal to save the new idle power.

Fast idling device

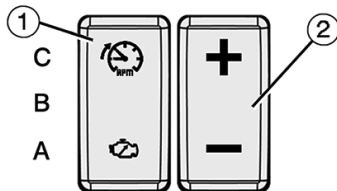
This device controls the engine idle speed, with the vehicle stationary.

Use

Parking brake applied, gearbox in neutral, move switch (1) to "A".

It is possible to adjust the engine speed by pressing either switch (2) or the accelerator pedal.

To store the engine speed using the accelerator pedal, press "+" or "-" on switch (2) then release the pedal.





After the function has been activated by moving switch (1) to "A", moving switch (2) to "+" directly restores the nominal speed of 900 rpm.



Avoid using the accelerator pedal while using fast idle.

To fine tune the speed:

- Move switch (2) to "+" to increase the engine speed progressively, or press briefly to increase the speed in steps of 50 rpm.
- Move switch (2) to "-" to decrease the engine speed progressively, or press briefly to decrease the speed in steps of 50 rpm.

Deactivating the function

The function is deactivated automatically if:

- the parking brake is released,
- a gear is engaged,
- switch (1) is moved to "B".

When at least one PTO is in service, the first action on switch (2) calls up the factory-set engine speed (1,000 rpm).

This speed can be adjusted but limited to 1,500 rpm (refer to **Power take-off(s)** section).

Depending on the equipment installed by the equipment manufacturer, this speed and the input conditions can be modified using the RENAULT TRUCKS test tool.

Geolocation

If your vehicle breaks down, you can be geolocated by this system, through the 24/7 breakdown assistance service.

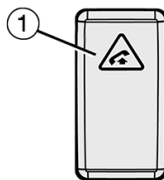
Operations

If your vehicle is immobilised, contact the 24/7 breakdown assistance service. **Tel: 00 800 1 234 24 24.**

After the usual formalities, you will be asked to press the switch (1).

Switch (1) will light up orange for 1 to 3 minutes during the search for your location.

Once your vehicle has been located, switch (1) is no longer lit and the operator confirms your location to you.



The 24/7 breakdown assistance service contacts the RENAULT TRUCKS garage closest to your location to provide you with assistance.

Hydraulic power-assisted steering



When the engine is stopped, the hydraulic power assistance is no longer operational, the force required to turn the steering wheel is significant.

If the steering becomes heavy while driving, stop the vehicle and determine the cause.

If any fault is detected, stop the vehicle and determine the cause.

- Check the level of the fluid in the reservoir.
- Check for any leaks on the hose connections or on the pipes; if there are, repair the leaks if possible (retighten connections or replace hoses).

Refill the reservoir with clean fluid of the recommended grade. Restart the engine and ensure that the pump is operating normally, perform several manoeuvres at low speed and at low engine speeds.

If the steering is still heavy, or if there is still doubt whether the pump is operating normally, have the assembly inspected at a RENAULT TRUCKS garage.

In no event must hydraulic components be removed or their initial setting modified. This work should be entrusted to a RENAULT TRUCKS garage.

The hydraulic system can only function correctly if it is perfectly clean. The greatest precautions must be taken on this matter when carrying out the above operations.

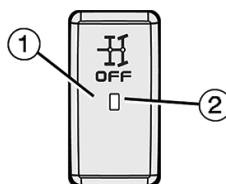
Rear steering axle with steering lock

The steering system for the rear lift axle improves the turning radius and reduces tyre wear.

In some applications this function enables the steering of the rear steering axle to be locked.

Activating the function

Vehicle running at a speed below 9 km/h: press the top of switch (1); switch tell-tale (2) illuminates. The wheels of the steering axle return and are locked in a straight line.



It is recommended to use it when moving in a straight line, because the turning radius is impaired and it changes the road behaviour of the vehicle.

Function standby

When vehicle speed goes above 9 km/h, the function is automatically deactivated and switch tell-tale (2) goes out.

The rear steering axle turns again.

When vehicle speed goes back down to 8 km/h, the function is automatically reactivated and switch tell-tale (2) illuminates.

Deactivating the function

Press the top of switch (1); switch tell-tale (2) goes out.

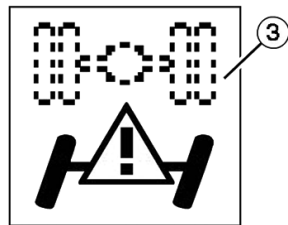
The steering axle is unlocked.



When deactivating or setting the function to standby, the rear steering axle turns again only when the wheels are in line with the vehicle and the steering wheel is turned in the opposite direction.

If there is a fault on the rear steering axle, pictogram (3) appears on the multifunction information display and the function is disabled.

Visit your nearest RENAULT TRUCKS garage.



If the power steering is faulty, this could:

- *change vehicle behaviour,*
- *limit vehicle steerability,*
- *increase the turning diameter,*
- *damage the axle if driving in reverse.*

Operating speed

Always select the gear ratio that allows you to use the engine at its most efficient engine speed, which is shown as a green sector (1) on the engine speed indicator of the tachometer.

When using the retarder, a blue sector (2) is displayed on the engine speed indicator on the tachometer. This blue sector tells you the maximum efficiency range for the retarder.

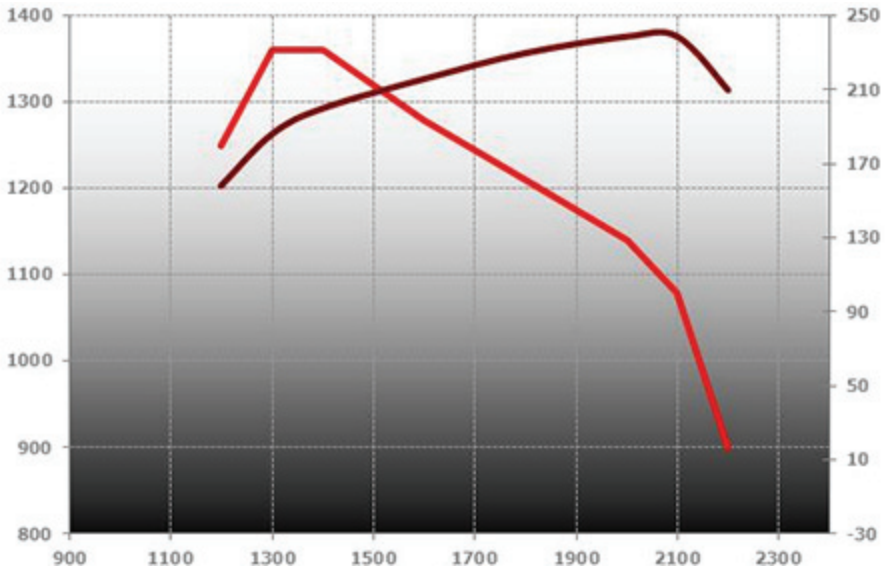


When the engine speed approaches within 400 rpm of its maximum speed, a red sector (3) is shown on the engine speed counter on the tachometer.

Never let the engine speed reach the red sector.

Power and engine torque curves

These curves are given as a guide, the torque or power values may vary slightly depending on the model of your vehicle.



Cruise control

Above 30 km/h, depending on the road profile, this function lets you drive at the stabilized road speed required without using the accelerator pedal.

STOP

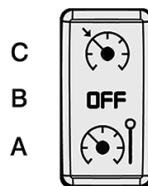
CRUISE CONTROL MUST NOT BE USED IN HEAVY TRAFFIC OR ON WINDING OR SLIPPERY ROADS.

CRUISE CONTROL IS A DRIVING AID MODE; IT CANNOT UNDER ANY CIRCUMSTANCES REPLACE COMPLIANCE WITH SPEED LIMITATIONS OR THE DRIVER'S RESPONSIBILITY.

STOP

BEFORE BEGINNING TO DESCEND A STEEP GRADIENT, SET THE CRUISE CONTROL SPEED SETTING TO A SUITABLE SPEED TO ENSURE THAT THE VEHICLE DOES NOT EXCEED THE LEGAL SPEED LIMIT IN FORCE.

- Take the vehicle to the required speed using the accelerator pedal, the retarder control or the service brake.
- Move the switch to position "C" to choose the cruise control mode.
- Press on the "+" or "-" button to activate the cruise control mode and set the setpoint speed.



When activating the cruise control or adjusting the set speed, the saved set speed and an icon are displayed in the main area (1) and in the cruise control information area (2) of the multifunction display. After a few seconds, this information is shown in area (2) only.



Adjusting the cruising speed setting

To adjust your cruising speed:

- A short press of the "+" button increases the setpoint speed by 1 km/h. One long press of the "+" button increases the setpoint speed by 5 km/h.
- A short press of the "-" button decreases the setpoint speed by 1 km/h. One long press of the "-" button decreases the setpoint speed by 5 km/h.

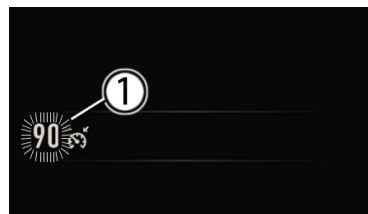


Exceeding the cruising setpoint speed

It is possible to exceed the setpoint speed (1) temporarily. To do so, press the accelerator pedal.

During the time the speed is exceeded, set speed (1) flashes on the speed information display.

When you release the accelerator pedal, the cruise control function is resumed automatically.



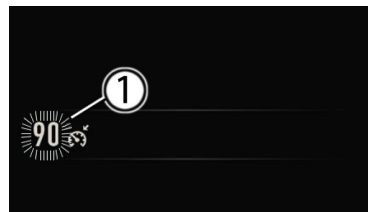
Maintaining the cruising setpoint speed

When going downhill, if necessary, the cruise control automatically controls the retarder to maintain the speed within 4 km/h above the set speed stored in memory.

A blue sector appears in zone (1) of the tachometer to indicate the engine speed at which retarder efficiency is optimal.



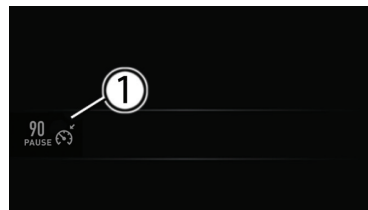
If the retarders cannot maintain set speed (1), the speed flashes on the speed information display; it is necessary to use the brakes.



In this case it is recommended to memorize a lower speed and/or to downshift.

Cruise control function standby

- you press control "O" on the steering wheel,
- vehicle speed is less than 15 km/h,
- you actuate the brake pedal or retarder control except when vehicle speed on downhill runs remains greater than the speed setting minus 2 km/h.



The cruise control is suspended when "ABS", "ASR" or "ESC" is engaged.

Recalling the cruising setpoint speed

If a set speed is saved on the speed information display, it can be re-applied in suitable traffic conditions.

Press on the **"RES"** button on the steering wheel.

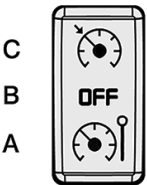


The word **"OFF"** on the warning light (1) will disappear and the set speed will be automatically re-applied.

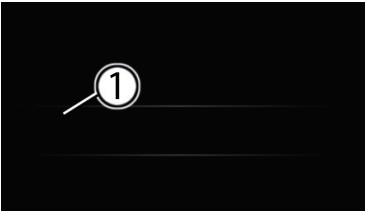


Deactivating the cruise control mode

To deactivate cruise control, turn the switch to position **"B"**.



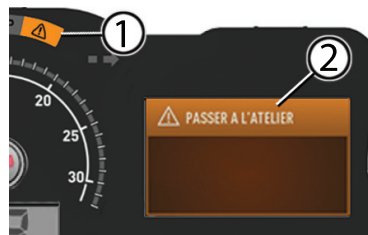
The icon and the saved set speed will disappear from area (1) of the display.



Fault present on cruise control mode

The "Service" warning light (1) will come on if the cruise control mode fails. A window appears in the main information area (2) of the multifunction display to warn you of the malfunction.

Contact a RENAULT TRUCKS service point.



Electronic speed limiter

The speed limiter is managed by the electronic injection system. In the event of an operating fault, only RENAULT TRUCKS garages are qualified to intervene.

Accelerator pedal

The technology used to drive your Renault Trucks vehicle requires a great deal of precision. Also, it is possible that the accelerator pedal may need to be calibrated.

If this is the case, messages will appear on the display telling you how to proceed. Follow the instructions carefully, and if in doubt, please contact your nearest Renault Trucks service point.

Depressing beyond a hard spot at the end of the pedal travel enables the driver to modify the gear shift management system to obtain optimum drive for the vehicle.



This function increases fuel consumption.

Lane departure warning system (LDWS)

Description

This function uses the road marking lines to visualise the position of the vehicle in relation to these white lines.

The lane departure warning system warns you in the event of accidental lane departure.



YOU SHOULD BE IN CONSTANT CONTROL OF YOUR SPEED AND ADJUST IT ACCORDING TO THE PROFILE AND CONDITION OF THE ROAD SURFACE, TRAFFIC DIFFICULTIES, FORESEEABLE OBSTACLES AND THE LEGAL SPEED LIMITATIONS IN FORCE.

The function is activated by default when the vehicle is started.

Operating conditions

- detection of white lines on the road;
- vehicle speed above 60 km/h;
- function active;
- no function input data errors.

Operations

The camera positioned behind the windscreen recognizes the different lines and markings on the road.

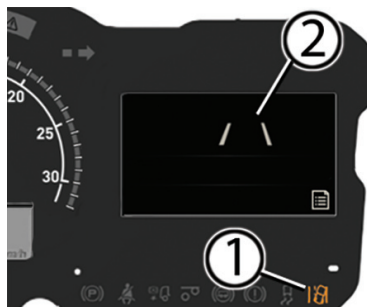
It then calculates the distance separating it from the right-hand and left-hand lines on the road.

On the basis of this distance, the camera determines whether the vehicle is moving closer to a line on the road and whether it is crossing it.

The system recognises that the wagon has reached a line when the tyre tread is covering the line.

If the line is crossed inadvertently, warning pictogram (1) flashes and an audible warning sounds at the instrument panel.

On the display, one of the lines shown (2) flashes to indicate which side of the lane the vehicle is crossing.



Inadvertent line crossing detection conditions:

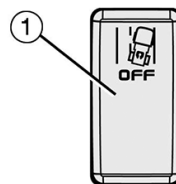
- the direction indicators have not been activated for the last 4 seconds;
- the white lines on the road are visible;
- the white lines are regular;
- during the 4 last seconds, the system has detected that the vehicle was in its traffic lane;
- there have been no warnings from the system in the last 4 seconds.



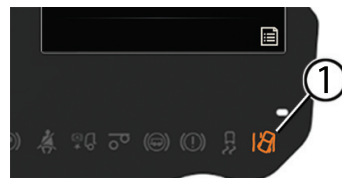
After activating the lane departure warning, the system can only issue further warnings once the vehicle is inside the road lane markings again.

Deactivating the function

You can deactivate the function manually by pressing switch (1).



Indicator pictogram (1) is displayed.



In some cases, the function can be deactivated:

- if the white lines on the road are not visible;
- in the event of roadworks;
- if the weather conditions are poor (heavy rain, snow, etc.);
- if the road is very narrow and winding.

In order to recognise and thereby avoid situations where the system might not perform correctly, please refer to the **"Devices to detect other road users"** pages in the **Safety** chapter.

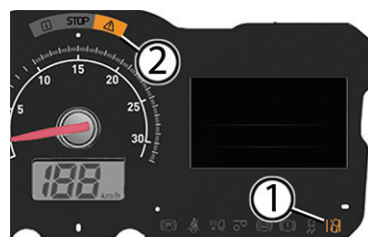


The function is reactivated by default the next time the vehicle is started.

LDWS system fault

- warning pictogram (1) lights up,
- "SERVICE" (2) indicator illuminates,
- A window will appear on the display (3) showing the message "STOP AT WORKSHOP - LDWS NOT OPERATING".

Contact a RENAULT TRUCKS service point.



Detection of an anomaly on the camera

A message **"CLEAN CAMERA - REDUCED SAFETY FUNCTION"** and its associated icon appear on the multifunction display (4). Clean the area in front of the camera shown in the illustration (in case of snow, ice, dust, etc).

If the anomaly persists after cleaning, contact a RENAULT TRUCKS garage.



Automatic emergency braking system (AEBS)

Description

The purpose of this function is to avoid colliding with the rear of motor vehicles travelling in front of and in the same direction as your vehicle, or to reduce the impact of such a collision if it is unavoidable. To do this, it detects moving and stationary vehicles in front of your vehicle and determines whether they represent a potential risk.

It informs you of dangerous situations, warns you by means of a visual and audible signal, and brakes your vehicle in the event of an imminent accident with the vehicle in front of you.

This function does not necessarily prevent the accident, but it can limit the consequences.

To do this, the AEBS system merges the data from two sensors (camera and radar) enabling it to detect and identify objects located in the area in front of your vehicle, and to determine their position and movement.



THE AEBS WILL NOT DETECT ALL POTENTIAL HAZARDS; IT IS ONLY A TOOL INTENDED TO COMPLEMENT DRIVING. YOU SHOULD BE IN CONSTANT CONTROL OF YOUR SPEED AND ADJUST IT ACCORDING TO THE PROFILE AND CONDITION OF THE ROAD SURFACE, TRAFFIC DIFFICULTIES, FORESEEABLE OBSTACLES AND THE LEGAL SPEED LIMITATIONS IN EFFECT. RELYING ENTIRELY ON THE AEBS MAY PUT YOU IN DANGEROUS SITUATIONS THAT CAN CAUSE IMPORTANT MATERIAL DAMAGES, SERIOUS INJURY OR DEATH.



THIS SYSTEM IS DESIGNED TO TRIGGER IN HAZARDOUS SITUATIONS. IT MUST NOT BE TRIED OR TESTED.



If you wait less than 9 seconds after switching off the ignition to reset it, the system will display error messages and may not work.

The function is activated by default when the vehicles is started.

Operating conditions

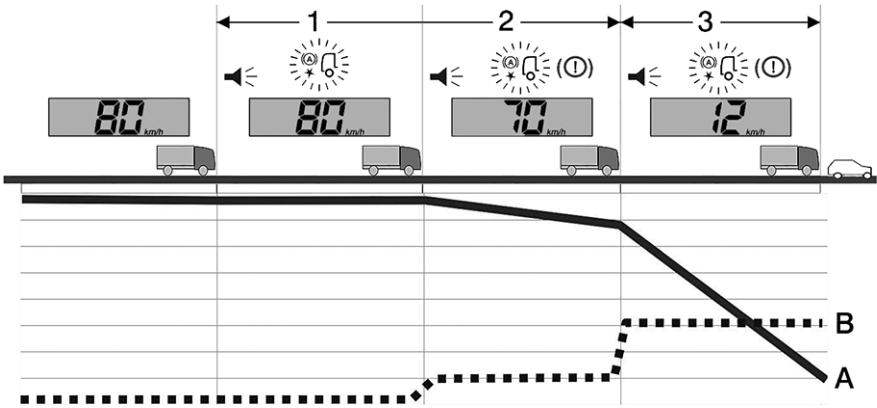
- vehicle speed above 5 km/h;
- function active;
- no function input data errors.



The system may display limited functionality if there is snow, ice or dirt in the immediate surroundings of the radar or camera. Adverse weather conditions such as heavy rain, fog or strong incident light can also limit functionality, in particular for the detection of stationary vehicles.

Operations

Depending on the information received by the sensors and the camera on the situation in front of your vehicle, the system warns you and brakes your vehicle if there is a risk of collision with the vehicle in front of you.



These situations are divided into 3 phases and calculated as a function of your vehicle speed, the distance between your vehicle and the one in front of you, and its speed. In some situations, the system may go through several steps to respond to the severity of the situation.

- A: speed curve.
- B: deceleration curve.

1 - Warning

If the driver does not notice a collision hazard detected by the system, the indicator (1) will flash and an alarm will sound to alert them that the situation is hazardous, but the vehicle's speed will not change.



You may see this warning frequently if driving aggressively.

2 - Partial braking

If you do not react to the collision warning, warning pictogram (1) flashes, an audible warning sounds and the automatic activation of partial braking warns you of the risk of imminent collision and begins to decelerate the vehicle.



When the system no longer detects a collision hazard, an icon (1) and a message (2) will notify you that the system automatically applied the brakes.



3 - Emergency braking

If you do not react to the collision warning or to partial braking, the previous audible and visual (1) warnings continue and emergency braking is activated automatically to try to avoid the collision.



During the emergency braking phase the brake lights flash; once the vehicle has stopped the hazard warning lights flash.

The emergency braking phase is interrupted if one of the following conditions is met

- disappearance of the risk of collision as a result of avoidance on your part or if the vehicle in front of you changes direction;
- the speed of your vehicle drops to less than or equal to that of the vehicle in front of you as a result of emergency braking;
- your vehicle comes to a complete standstill as a result of emergency braking;
- the accelerator pedal is fully depressed **"Kick down"**.

Once the risk of collision has been averted by emergency braking, a message on the display tells you that you should either apply the parking brake or resume your journey.

Once your vehicle has been brought to a complete stop by the system, it automatically keeps the brakes applied until the brake pedal is depressed, the accelerator pedal is depressed, reverse gear is engaged or the parking brake is engaged.



Once three emergency braking events have been triggered, the system is deactivated. Contact a RENAULT TRUCKS service point to reactivate it.



After a collision or minor impact around the sensor zone, contact a RENAULT TRUCKS service point to check that the operation and settings of the sensors are correct.

Situations requiring attention

The system may have problems identifying and handling certain situations. Always be careful while driving.

Be aware of traffic conditions and be ready to apply the brakes at all times.

- The system has a limited ability to detect:
 - Motorcycles and other small road users
 - Vehicles with unusual shapes, such as boat trailers
 - Vehicles in poor visibility conditions, with strong reflected light or bright lights from oncoming traffic, or reflections from wet roads
 - Vehicles in poor weather conditions, such as fog, heavy rain or clouds of snow from other vehicles

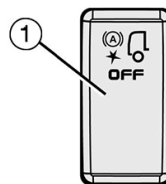
In order to recognise and thereby avoid situations where the system might not perform correctly, please refer to the "**Devices to detect other road users**" pages in the **Safety** chapter.



The system accounts for stationary vehicles as well as vehicles travelling in the same direction in the same lane. It does not account for vehicles crossing the lane or coming from the opposite direction. Additionally, the system does not account for animals, pedestrians or bicycles.

Deactivating the function

You can deactivate the function manually by pressing switch (1).



Indicator pictogram (2) is displayed.
A warning light (1) comes on.



In some cases, the function should be deactivated:

- if the vehicle is towing several trailers;
- if the trailer has a faulty ABS or is not fitted with the ABS system;
- if the vehicle is fitted with a tool holder (e.g. snow plough);
- if the front of the vehicle is damaged.



The function will reactivate by default the next time the vehicle is started.

AEBS system fault

If a fault is detected by the system:

- the **"SERVICE"** (1) warning light will come on.
- An icon (2) will appear on the display.
- warning pictogram (3) lights up,
- the message (4) **"STOP AT WORKSHOP - AEBS NOT OPERATING"** appears on the multifunction display,

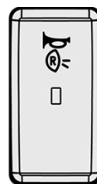


Contact a RENAULT TRUCKS service point.

Reversing buzzer

When shifting to reverse gear, an audible warning signals to those in proximity that the vehicle is reversing.

A switch deactivates the "buzzer" function.



"EBS" system

The "EBS" system manages vehicle braking and assures anti-lock braking and anti-slip regulator functions.

Anti-lock braking system "ABS"

This system prevents the wheels from locking under sharp braking.

In this way, the vehicle retains its manoeuvrability.

"ASR" Anti-slip regulation system

When you move away or under acceleration, this system prevents the wheels from slipping, whatever the condition of the road surface.

This function is activated:

- if a wheel slips, this wheel is braked to bring its speed into line with that of the opposite wheel;
- if two wheels slip, engine speed is limited then the slipping wheel is braked to bring its speed into line with that of the wheel opposite.

On the road

During operation of the ASR system, indicator pictogram (1) flashes.

For further information on the "ASR" system, refer to the **Driving on difficult terrain** section.



"DTC" system: dynamic traction control

This system ensures better stability and traction of the vehicle, by preventing the drive wheels from skidding on surfaces with low adhesion on hard acceleration or when downshifting.

During operation of the DTC system, pictogram (1) flashes.



Emergency brake assist

By measuring the speed at which the brake pedal is depressed, the system serves to detect an emergency braking situation.

In this case, the braking pressures are reduced to obtain more efficient braking.

This function ensures maximum power is available in the event of emergency braking.

Under severe deceleration, the stop lights flash to warn following vehicles.

The stop lights cease to flash as soon as deceleration returns to normal.

"ESC" system

This is a stabilisation system that reduces the risks of skidding and rollover.

"ESC": electronic stability control

If the system detects a risk of skidding (understeer or oversteer), acceleration is reduced and the brakes are automatically applied to the wheels, keeping the vehicle on its path.

Active retarders are automatically deactivated in an ESC phase.

Indicator pictogram (1) flashes during the ESC phase.



"ESC": anti-rollover

If the system detects a risk of rolling over, acceleration is reduced. If this reduction is insufficient, the system automatically brakes the vehicle to reduce its speed.



Use the vehicle in the same way as a vehicle without ESC.

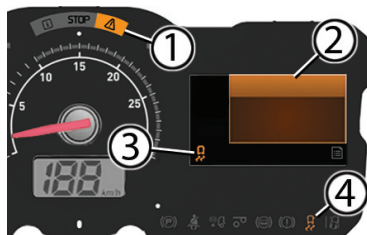
ESC reduces the risk of rolling over or skidding. However, a vehicle can roll over if the load has a very high centre of gravity, if it strikes a kerb at high speed or in the event of unsuitable driving.

The vehicle may also lose traction on icy roads despite being fitted with ESC.

Faulty "ESC" system warning

- "Service" indicator (1) illuminates,
- a message (2) and an icon (3) appear on the display,
- the warning lights (4) come on.

Visit your nearest RENAULT TRUCKS service centre.



DO NOT USE A VEHICLE FITTED WITH ESC ON A TRACK WITH VERY STEEP BENDS (SUCH AS A TEST CIRCUIT).



USING THE VEHICLE ON ROADS WITH RAISED EDGES MAY RESULT IN DANGEROUS INTERVENTIONS OF THE ESC SYSTEM. IF THE VEHICLE MUST BE DRIVEN ON THIS TYPE OF ROAD, VISIT A RENAULT TRUCKS GARAGE TO DISABLE THE ESC FUNCTION.



This function is an additional aid in the event of critical driving conditions.

However, it does not increase the limits of the vehicle.

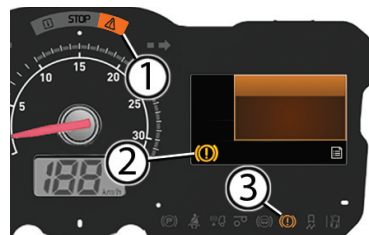
It should not encourage you to drive more quickly. In no instance must it replace the vigilance or responsibility of the driver while driving (the driver must always be alert for sudden events which may happen while driving).

"EBS" system faults

If the system detects a minor loss of braking performance:

- the "Service" (1) warning light will come on,
- an icon (2) will appear on the multifunction display along with a message,
- warning pictogram (3) lights up in yellow.

Have the braking system of the rigid vehicle inspected by a RENAULT TRUCKS garage (brake tester).



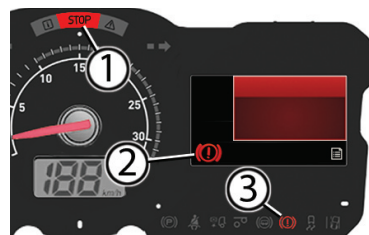
If the minor braking fault causes a loss of the "ABS" funct will appear on the multifunction display.

The vehicle's conventional braking is restored.



If the system detects a major loss of braking performance:

- the "STOP" warning light (1) is displayed,
- an icon (2) will appear on the multifunction display along with a message,
- warning pictogram (3) lights up in red.



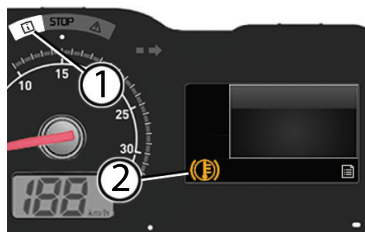
It is imperative to stop the vehicle and contact the nearest RENAULT TRUCKS garage.



In the event of an electronic control mode fault, the EBS system switches to pneumatic backup mode and a difference in feel on the brake pedal may be felt. Maximum braking power is still available when the pedal is depressed fully.

Brake temperature warning

If the system detects that the brake temperature is too high, the "Information" light (1) comes on, along with an icon (2) and a message on the multifunction display.



A loss of sensation may be felt when pressing the brake pedal.

It is then necessary to adapt the vehicle speed and driving style. Use the retarder(s).

Brake pad wear warning

- the "Service" (1) warning light will come on,
- an icon (2) will appear on the multifunction display along with a message,
- warning pictogram (3) lights up.

Visit your nearest RENAULT TRUCKS service centre.



Parking brake

For safety reasons, make sure that the parking brake is correctly applied before leaving your seat.

When you park the vehicle:

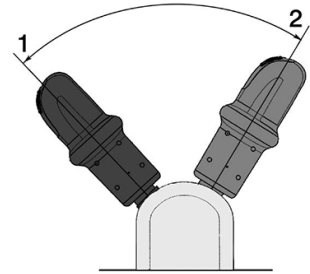
- Make sure that the ground under your vehicle is flat and stable.
- Make sure that the vehicle is correctly parked (no risk of disturbing the traffic or safety risk for traffic, persons or surrounding facilities, following the highway code).

Lift the locking pin and move the lever from position (2) to position (1). Warning pictogram (3) is no longer displayed.

Application

Lift the locking pin and move the lever from position (1) to position (2). Release the locking pin and ensure that the lever is locked in position (2). Pictogram (3) is displayed.

The vehicle is immobilised by the rear axle(s).

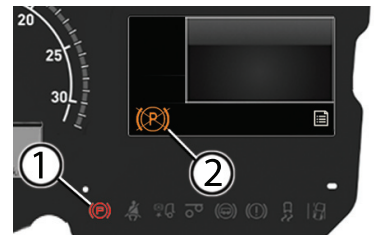


Moving away uphill

To move away more easily on hills, you can use the parking brake as far as the hard point, but not passing it. When the lever is released, it will return automatically to position (1).



When the driver's side door is opened or 5 seconds after the ignition is switched off, an audible warning and the appearance of an icon (2) and a message on the multifunction display will warn you that the parking brake has not been locked in place.



Push the lever and move it from position (2) to position (3). This position releases the trailer braking and the whole vehicle is immobilised by the tractor. This position serves to ensure that the tractor alone can hold the whole vehicle immobilized.

As soon as the lever is released, it returns automatically to position (2), i.e. the parking position.

Emergency brake

In the event of a service brake fault on one axle, the other axle provides emergency braking efficiency.

Introduction

On vehicles fitted with an automatic gearbox, the driver must choose the right moment to change up or down gears, depending on the state of the road and traffic conditions.

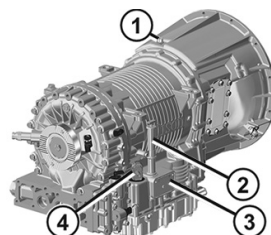
STOP

BEFORE STARTING THE ENGINE, CHECK TO MAKE SURE THAT THE PARKING BRAKE IS APPLIED AND THAT THE SELECTOR LEVER IS IN THE NEUTRAL POSITION. IF THESE TWO CONDITIONS ARE NOT MET WHEN STARTING THE ENGINE, THE VEHICLE CAN MOVE SUDDENLY AND THERE IS A RISK OF PHYSICAL DAMAGE OR PERSONAL INJURY AND EVEN DEATH.

Automatic gearbox

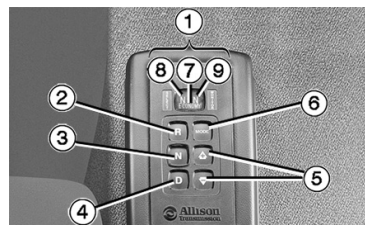
Description

- 1 - Breather
- 2 - Filler pipe and oil dipstick
- 3 - Name plate
- 4 - Power harness connector



Description

- 1 - Digital display*
- 2 - Reverse button
- 3 - Neutral button
- 4 - Drive button
- 5 - Gear selection buttons
- 6 - Mode button
- 7 - Mode indicator
- 8 - Selected gear displayed
- 9 - Engaged gear displayed





(*) The gear displayed in the upper part (8) corresponds to the mode selected: R, N or D. In mode D, this information indicates the highest forward drive gear that can be obtained. The gear shown in the lower part (9) corresponds to the gear engaged. If this information is flashing, this means that the gear change is blocked.

Use

Regardless of the weather conditions, your automatic gearbox will always allow you to use your vehicle within the limits set for your safety and that of the equipment.

Push-button gear selector

Depending on your vehicle's equipment

General description

The push-button gear selector has buttons R, N, D, ↑, ↓, a **MODE** button and a digital display.

Button R:

Press this button to select reverse.

Refer to chapter: "**Mode R**".

Button N :

Press this button to select neutral.

Refer to chapter: "**Mode N**".

Button D:

Press this button to select drive. The highest available forward gear is displayed on the digital display. The gearbox initially shifts to in the lowest available forward gear, then shifts automatically to the higher gears.

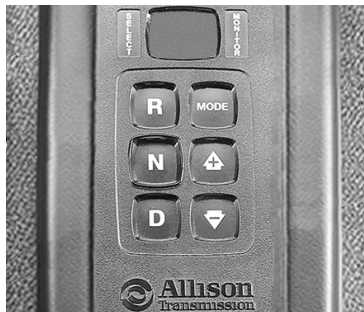
Refer to chapter: "**Mode D**".

Buttons (arrows) ↑, ↓ :

After selecting mode **D** (drive), depress arrow button ↑ (up) or ↓ (down) to increase or decrease the highest gear ratio that can be reached; refer to chapter: "**Mode ↓ / ↑**".

Pressing buttons ↑ (up) and ↓ (down) simultaneously gives access to the oil level data and the fault codes.

For more information, refer to chapter: "**Checking the oil level using the gear selector**".





The oil level information is displayed the first time the buttons are depressed simultaneously. Press the two buttons again to access the fault code data.

MODE button:

The **MODE** button allows the driver to activate a second gearshift programme or another special function.

Digital display :

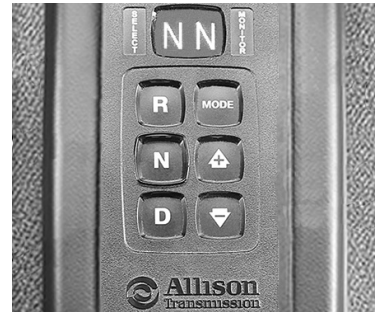
During normal operation, when mode D (drive) is selected, the digital display indicates the highest forward gear that can be reached in this mode.



If you leave the vehicle while the engine is running, it may move suddenly and risks causing injury.

If you have to leave the engine running, before leaving the vehicle you should:

- put the gearbox in mode **N** (neutral),
- check that the engine is running at idle (between 500 and 800 rpm),
- apply the parking brake and check that it is correctly engaged,
- chock the wheels and take all the measures necessary to prevent the vehicle from moving.



Check the digital display each time the keypad buttons are pressed to ensure the gear selected is displayed (for example, if you press button **N** (neutral), the letter **N** should appear on the digital display).



A flashing indication means that the gear range in the selected mode is not engaged because of an active inhibitor.

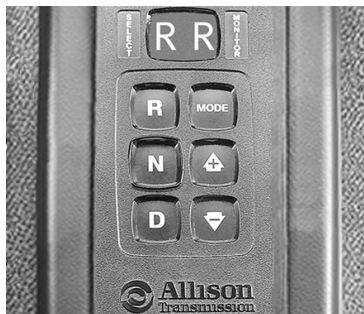
STOP

NEVER ALLOW THE ENGINE TO RUN AT HIGH SPEED FOR MORE THAN 10 SECONDS WHEN A MODE OTHER THAN (N) IS SELECTED AND THE VEHICLE IS STATIONARY. HIGH RISK OF CAUSING SERIOUS DAMAGE TO THE VEHICLE AND TRANSMISSION.

Mode R

Before shifting from mode **D** (drive) to mode **R** (reverse) and vice versa, bring the vehicle to a complete stop and let the engine run at idle.

The digital display shows "R" when mode **R** (reverse) is selected.



*It may be that mode R does not engage because of an active inhibitor.
If indicator "R" flashes, this means that shifting to mode (R) is inhibited.*



*Do not let the engine run at idle in mode R or D for more than 5 minutes. Extended idling in one of these modes may cause overheating and damage to the gearbox. Always select mode **N** (neutral) if idling continues for more than 5 minutes.*

Mode N

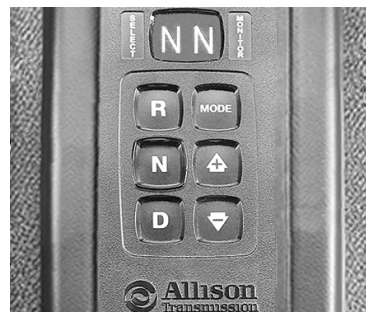
Select neutral (**N**) to start the engine, to check the vehicle accessories and in the event of operating at extended idling (more than 5 minutes).

Neutral (**N**) is selected automatically on start-up.

If the vehicle starts in a mode other than mode **N** (neutral), consult a RENAULT TRUCKS garage.

Neutral (**N**) is also used for operating the power take-off when stationary (if your vehicle is fitted with a PTO).

The digital display shows "N" when neutral (**N**) is selected. Always select neutral (**N**) before stopping the vehicle engine.



*The vehicle service or parking brakes must be applied each time neutral (**N**) is selected to prevent any unexpected movement of the vehicle.*

*Shifting to neutral (**N**) does not brake the vehicle, unless an auxiliary system for automatic application of the parking brake is installed.*



*If you allow the vehicle to run in neutral (**N**), the engine brake will not work; this may potentially cause loss of control of the vehicle. Running in neutral (**N**) also risks serious damage to the gearbox. To avoid any risk of accident and damage to property, never leave the vehicle running in neutral (**N**).*



If you leave the vehicle while the engine is running, it may move suddenly and risks causing injury. If you have to leave the engine running, before leaving the vehicle you should:

- *put the gearbox in mode **N** (neutral),*
- *check that the engine is running at idle (between 500 and 800 rpm),*
- *apply the parking brake and check that it is correctly engaged,*
- *chock the wheels and take all the measures necessary to prevent the vehicle from moving.*



Check the digital display each time the keypad buttons are pressed to ensure the gear selected is displayed (for example, if you press button **N** (neutral), the letter **N** should appear on the digital display).



A flashing indication means that the gear range in the selected mode is not engaged because of an active inhibitor.



If starting on a steep slope, use the parking brake: release the parking brake keeping the service brake (brake pedal) depressed, then release the service brake and accelerate.

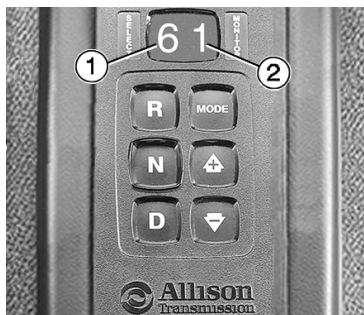
Mode D

The gearbox automatically shifts to first gear when mode **D** (drive) is selected (except for the gearboxes programmed to start in second gear).

When vehicle speed increases, the gearbox automatically shifts up to the higher gears.

When vehicle speed decreases, the gearbox automatically shifts down to the lower gears.

The digital information display indicates the highest gear (1) that can be reached, and also the gear engaged (2).



Do not let the engine run at idle in mode **R** or **D** for more than 5 minutes. Extended idling in one of these modes may cause overheating and damage to the gearbox. Always select mode **N** (neutral) if idling continues for more than 5 minutes.



It may be that mode D does not engage because of an active inhibitor. If indicator "D" flashes, this means that shifting to mode D is inhibited.



When the vehicle is stationary and the parking brake is activated, the gearbox shifts to neutral. On the digital display, the gear selected (1) flashes and the information "N" (2) is displayed.



If the parking brake is released without depressing the service brake (brake pedal) the gearbox remains in neutral. The vehicle will then move in the direction of the slope. To avoid this risk, never release the parking brake without applying the service brake (brake pedal).

Mode ↓ / ↑



On downhill runs, if you use only downshifting or the service brakes, you risk losing control of the vehicle and causing accidents and damage to property.

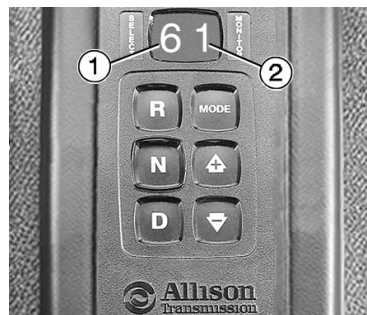
To avoid such a situation, combine downshifting, braking and other deceleration devices.

Downshifting increases engine braking and provides better control of the vehicle.

The gearbox has a safety function that blocks automatic upshifting above the gear selected.

However, on downhill runs, in the event of overspeeding in the gear selected, it is possible the gearbox will shift to the next higher gear. This reduces deceleration and risks causing loss of control of the vehicle.

To avoid any overspeed in the gear selected, use the vehicle brakes or any other deceleration device.



The state of the road, the load or traffic conditions may require automatic downshifting to be limited.

The lower gears ensure greater braking on downhill runs (the lower the gear, the greater the engine braking).

The push-button gear selector has arrow buttons for selecting the highest gear (1) that can be reached in mode D.

By pressing arrow button ↓ (down), the highest gear authorised will be identical to the gear engaged (2).



It is not possible to select a gear lower than the gear engaged (this avoids any risk of overspeed in the gear selected).

Depress arrow button ↑ (up) as many times as necessary to reach the highest gear required.

Use gear 1 to free a vehicle stuck in mud or snow, to manoeuvre in tight spaces or to ascend or descend steep slopes.

Gear 1 provides the vehicle with optimum drive torque and maximum engine braking. Push the ↓ (down) arrow; digit "1" appears on the digital information display.

MODE button

By default, the gearbox operating mode is "Performance" mode.

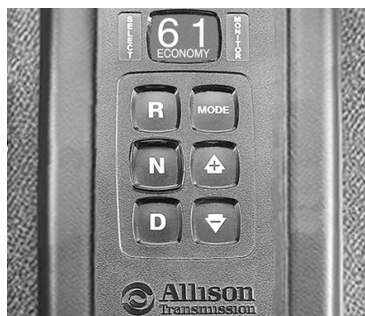
In this mode, the gearbox is managed to obtain the most efficient gearshifting possible.

Depress the MODE button to select "Economy" mode. In this mode, gearshifting is managed for minimum fuel consumption.

The "ECONOMY" information is then shown on the display.

To deactivate "Economy" mode, press the MODE button again.

The "ECONOMY" information disappears from the display.



"Kickdown" function

When "Economy" mode is selected ("MODE" button depressed), depressing the accelerator pedal beyond the first stop (hard point) causes a shift to "Performance" mode. Releasing the accelerator pedal causes a return to "Economy" mode.

Cold weather start-ups

When starting in cold weather, the transmission will limit shifting until it is sufficiently warm.

If the temperature of the box is below 10°C, be careful when making directional selections:

- To change from forward to reverse gear, shift into neutral before engaging reverse gear.
- To change from rear to forward gear, shift into neutral before engaging a forward gear.



Any failure to follow this procedure will result in the risk of turning on the "CHECK TRANS" instruction, and locking the transmission in neutral (N).

During cold starts, if the temperature is below 0°C, you may notice shifts in the operation of the transmission. In order to limit these inconveniences, you can:

- Make sure you have a good oil level.
- Allow the vehicle to warm up before setting off.
- If it is not possible to ensure a warm-up period, drive with the engine running between 1300 and 1500 rpm in Drive mode (D).



IN ANY EVENT, BE CAREFUL AND KEEP YOUR EYES ON THE ROAD, WITH GREATER ANTICIPATION THAN USUAL TO AVOID ACCIDENTS.

Accelerator

The position of the accelerator pedal affects the automatic gear shifting points.

When the accelerator pedal is fully depressed, automatic upshifting occurs at high engine speeds.

If the accelerator pedal is partially depressed, automatic upshifting occurs at lower engine speeds.

An electronic accelerator position signal tells the ECU how far the accelerator pedal has been depressed by the driver.

Excessive acceleration affects changes in direction of travel (shift from neutral N to modes D (drive) or R (reverse)).



To avoid any risk of injury or damage to property caused by sudden movement of the vehicle, do not shift from mode **N** (neutral) to modes **D** (drive) or **R** (reverse) when the accelerator pedal is depressed.

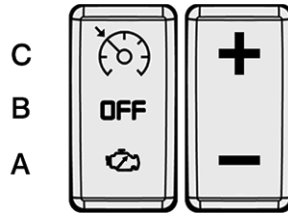
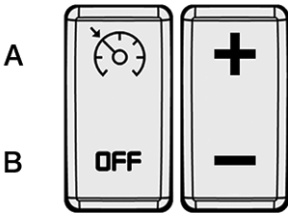
If you change gear while accelerating, the gear only engages if the pedal is released within the next 3 seconds. This may cause a sudden vehicle movement.

If acceleration is maintained for more than 3 seconds, the gearbox remains in neutral **N**.

To avoid this, release the accelerator pedal before shifting from mode **N** (neutral) to modes **D** (drive) or **R** (reverse).

Downshift and direction change inhibitor function

Depending on your vehicle's equipment



Place the vehicle's fast idle switch in position **(B)** before shifting from mode **N** (neutral) to modes **D** (drive) or **R** (reverse).

Shifting from mode **N** (neutral) to modes **D** (drive) or **R** (reverse) is inhibited when engine speed is above idling speed.

Using the hydraulic retarder



Do not use the hydraulic retarder during inclement weather or on slippery roads. De-energise the retarder at the master control switch.

To avoid any risk of injury or damage to property caused by the loss of control of the vehicle, be ready to apply the brakes or use any other deceleration device if the gearbox hydraulic retarder is not activated.

Check the operation of the hydraulic retarder regularly. If it does not activate, seek help immediately at a RENAULT TRUCKS garage.

On vehicles fitted with a retarder control, whose action is based on releasing the accelerator pedal, the position of the brake pedal or braking pressure, always deactivate the hydraulic retarder control manually in bad weather or on slippery roads.

Regardless of the type of retarder control installed on your vehicle, the following safety features are common to each configuration:

- the retarder must be deactivated in inclement weather or on slippery roads,
- the stop lights should always be illuminated when the hydraulic retarder is applied (regularly check that they are working),
- the anti-lock brake systems send a signal to the ECU to indicate that the braking system has been activated.



The hydraulic retarder is deactivated (and the lock-up clutch released) automatically when the ABS system (vehicle's anti-lock braking system) is active.

However, if the ABS system malfunctions, it is recommended to set the retarder switch, if present, to the stop position.

A hydraulic retarder is available on all the models described in this manual.

The retarder can be activated and controlled in various ways, depending on the vehicle type and the particular use of the model.

There are manual and automatic controls.



If you notice a reduction in the performance of the hydraulic retarder, ensure that the gearbox oil level is correct.

A low oil level is a common cause of problems with hydraulic retarder performance.



The hydraulic retarder requires approximately 1 second(s) to reach the optimal capacity required. Take this delay into consideration when you use the hydraulic retarder; this will avoid unnecessary use of the service brakes during non-emergency stops.



When the temperature of the gearbox oil or coolant exceeds the programmed values, the hydraulic retarder capacity is automatically and gradually reduced to minimise or avoid any risk of the system overheating.

Contact a RENAULT TRUCKS garage to learn about the type of hydraulic retarder control fitted on your vehicle.



Observe the following precautions when you drive a vehicle fitted with a hydraulic retarder. The retarder works only when the accelerator is not actuated (accelerator pedal released). Monitor the transmission and engine temperature at all times. Select the lowest possible range to optimise cooling system and deceleration performance. In the event of overheating, decrease the use of the retarder; instead, use the service brakes to reduce vehicle speed. Monitor the gearbox oil overheating light to ensure that it is working correctly.



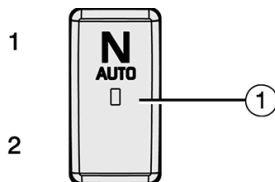
For best hydraulic retarder effectiveness, the gearbox oil level must be set correctly. A level 2 litres higher or lower than the normal level can impair retarder performance and increase gearbox temperature.

Activating the "Automatic neutral" function

Depending on vehicle equipment.

Activating the function

Put switch (1) in position "1"; the indicator light illuminates. Stop the vehicle and keep the brake pedal depressed (service brake). When the vehicle has stopped, the gearbox shifts automatically to neutral.

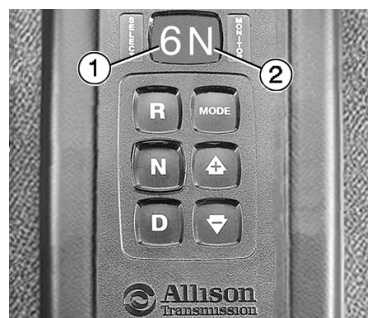


During this phase, indicator (1) and an associated text (2) appear on the multifunction information display.



On the digital display, the gear selected (1) flashes and the information "N" (2) is displayed. Fast idle can then be activated for the use of the equipment fitted to the PTO.

Release the brake pedal; the vehicle is held braked temporarily and the gearbox engages the appropriate gear. Start the vehicle by accelerating. The brakes will be released automatically when the accelerator pedal is depressed.

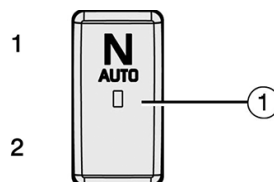


An audible signal sounds for 2 seconds before releasing the vehicle brakes if no action is engaged on the accelerator pedal.

The brakes are automatically released after action on switch (1).

Deactivating the function

To disable the function, set switch (1) to position "2"; the switch indicator light goes out.



Engine stop

Make sure the engine is idling (between 500 and 800 rpm).

Engage the parking brake and ensure that it is correctly applied.

Block the wheels with wheel chocks or any other means necessary to prevent any unintentional movement of the vehicle.

Oil level check

Modern automatic gearboxes are very sensitive to the level and quality of the oil they contain. It is recommended that you pay attention to this point.

Checking the oil level with the gear selector

Park the vehicle on a level surface, shift to mode **N** (neutral) and apply the parking brake.

- **Push-button gear selector:** push the ↓ (down) and ↑ (up) buttons simultaneously.



TRANS OIL
LEVEL OK



OIL LEVEL
INVALID



TRANS OIL
2QT HI



TRANS OIL
2QT LO

Table of oil level fault codes

Display	Cause of code
SETTLING / X	Level stabilisation time too short
ENG RPM / TOO LOW	Engine speed too low
ENG RPM / TOO HIGH	Engine speed too high
MUST BE / IN NEU	Neutral must be selected
OIL TEMP / TOO LOW	Oil temperature too low
OIL TEMP / TOO HI	Oil temperature too high
VEH SPD / TOO HI	Output shaft speed
SENSOR FAILED	Defective sensor *
* Report any defective sensor display to the nearest RENAULT TRUCKS garage.	



Cold weather fluid recommendations

Recommended fluid type	Minimum temperature
TES 295® and TES 668™	-35°C
TES 389®	-25°C

Retarder

Using the retarder means that it is possible to maintain a constant speed during descents and thus relieve the load on the service brake and retain its maximum efficiency in the event of emergency braking.

The other advantages of using the retarder are as follows:

- reducing brake lining wear.
- reducing brake overheating on the wheels.



Do not use the retarder on slippery surfaces. The retarder brakes only the driven wheels, which increases the risk of locking and skidding the wheels.

Use

While the retarder function is active, a blue sector (2) appears on the engine speed indicator on the tachometer. This blue sector indicates the maximum efficiency band of the retarder.

The retarder function is disabled in ABS and ESC phases.



Never let the engine speed reach the red zone (engine overspeed).

Manual mode

The control (1) located under the steering wheel activates the retarder.

An indicator (1) informs you of the position of the retarder control.

The braking power is modulated as a function of the vehicle load and the pressure exerted on the brake pedal.

Coupling of the retarder and the cruise control (constant speed)

The blue sector (2) on the engine speed indicator lights up if the exhaust retarder and/or engine retarder functions are active.

See chapter **Driving**.



Changes on difficult terrain

Speed changes on difficult terrain should be slow, to allow for proper analysis of upcoming topography. Cab comfort must not make you forget that these are 12- or 14-tonne heavyweights moving on very difficult terrain.

Locking differentials

The differential lock forces the drive wheels on the same axle to rotate at the same speed. Sometimes the differential lock is required in order to maintain traction when driving in road slippery conditions (for example, ice, sand, mud). Only use the differential lock at low speeds and without turning the truck.

Note that differential locks make steering more difficult, and the vehicle does not react as fast to changes in direction.

You should only engage the differential locks when the grip conditions require it (risk of breaking axles and accidents).

Locks should be disabled as soon as possible, in the reverse order to engagement.

"Rear drive axle(s)" inter-wheel differential lock

Do not use:

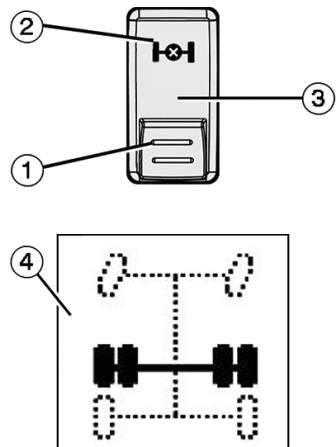
- on good grip surfaces (highway, dry or rocky terrain),
- on bends:
- when the vehicle is fitted with a non-skid device (chains etc.).

Double locking switch, refer to **Driving position** section.

Engagement

Differential lock management with EBS assistance

On surfaces with low levels of grip or when approaching a slippery section of the roadway (while driving, without altering your driving speed, at a vehicle speed below 30 km/h), unlock via button (1) then press top (2) of switch (3); pictogram (4) is displayed once the differential lock is engaged.



Disengagement

Press switch (3). Indicator pictogram (4) should no longer be displayed. If it is, driving very slowly, turn slightly to the left and to the right going through a straight line to disengage the dog clutch and make the pictogram(s) disappear.



The inter-wheel differential lock is disengaged automatically as soon as vehicle speed is above 30 km/h.

When the speed falls back below 25 km/h, it re-engages automatically.

"ASR" Anti-slip regulation system

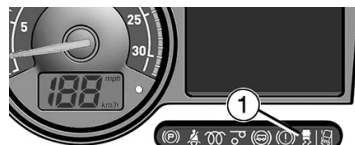
When you move away or under acceleration, this system prevents the wheels from slipping, whatever the condition of the road surface.

This function is activated:

- if a wheel slips, this wheel is braked to bring its speed into line with that of the opposite wheel;
- if two wheels slip, engine speed is limited then the slipping wheel is braked to bring its speed into line with that of the wheel opposite.

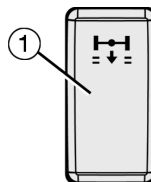
On the road

During operation of the ASR system, indicator pictogram (1) flashes.



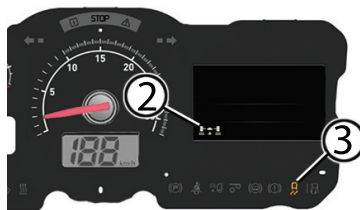
"ASR" off-road mode

Activate off-road mode if you have to drive on very uneven or slippery surfaces. Press switch (1).



Driving on difficult terrain

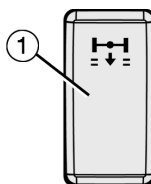
In this mode, ASR allows more wheel slip of the drive wheels, which can improve traction in certain conditions (loose ground, mud etc.). It is not recommended to activate it on the road.



Deactivating the function

Press switch (1) for more than 5 seconds. Pictogram (2) lights up and pictogram (3) appears on the multifunction display.

The ASR must be deactivated off-road, in difficult terrain, when off-road mode proves inadequate.



Exiting off-road mode or re-activating the function

- On switching off the ignition.
- By pressing switch (1).

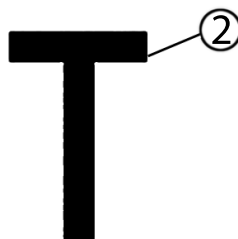


The "DTC" (trajectory control) and "ESC" (roll-over prevention) systems remain active even after deactivation of the "ASR" system or going into off-road mode. However, the trajectory control is wider-focused to permit the vehicle to drift further before the "ESC" system is activated.

Tachograph

If the tachograph printer drawer is left open when switching off the ignition, an audible signal sounds and a warning icon (2) and its associated message will appear on the multifunction information display.

Close the tachograph printer drawer again.



If the vehicle is to be laid up for a prolonged period of time (more than ten days), disconnect the circuit by removing the fuse (F68 - F98) to avoid discharging the batteries through the tachograph.

Stopping the vehicle

1. Apply the parking brake.
2. Put the gearbox in neutral position.
3. Wait for the engine to return to idling speed.
4. Switch off the ignition.
5. Switch off the electric power supply via the battery cut-out 70 seconds after the engine stops.



To avoid damage to the alternator and the electronic components of the vehicle, never switch off the current via the battery cut-out before the engine stops.

Air suspension

Electronic air suspension

This is pneumatic suspension that is pilot-controlled by an electronic system. In addition to the benefits of conventional air suspension, it has the following advantages:

- Optimisation of loading and unloading bay services and last level stored in the memory (even after the current is switched off);
- Automatic level correction parallel to the vehicle axis (even in the event of uneven load distribution);
- tyre savings (with axle lift option);
- functions controlled by a remote control unit;
- Reduced number of air hoses;
- Level correction is quick with low air consumption;
- Built-in safety systems (alarm, defect mode procedures);
- Programming according to the vehicle and to different legislation;
- At speeds above 10 km/h, the chassis returns to normal level.

Operations

- **Automatic mode**

The system always adjusts the suspension to the normal level defined by programming.

- **Manual mode**

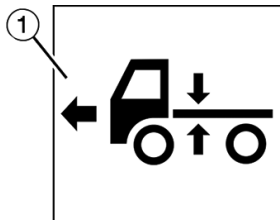
By programming, operation in manual mode is only possible below 10 km/h. Manual mode allows the chassis height to be positioned to the level required. Automatic mode is resumed via the (normal level) button on the remote control unit or when the speed is above 10 km/h.

Information tell-tale (1)

- This is displayed as soon as the vehicle level is other than normal.

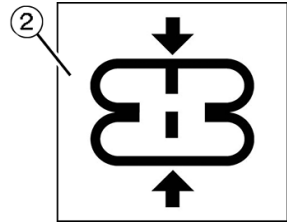
On the road

pictogram (1) and the message "**NOT IN DRIVE POSITION**" appear on the multifunction information display warning of a suspension fault.



Warning tell-tale (2)

- It is displayed with the message **"SWITCH OFF IGNITION"** and the **"SERVICE"** indicator as soon as a fault is identified. The ECU safety function automatically neutralises the control system partially or completely.



When stationary

Displaying pictogram (2) indicates a suspension fault. Carry out a test (refer to the **Test operation** section).

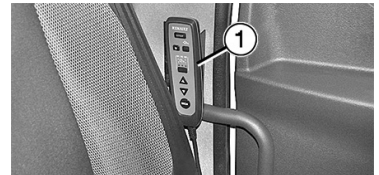
Restarting

When starting the vehicle, the suspension height is only taken into account when the parking brake is released.

Remote control unit

There is a corresponding ECU type for each suspension equipment.

Location of remote control (1) inside the cab.



Vehicle with adjustable rear suspension

The remote control can be used to raise or lower the rear suspension and return the vehicle to the road position.

The remote control is operational if:

- the ignition is on;
- air pressure is greater than 8 bar;
- speed is less than 10 km/h.

Control buttons:

- (1) "STOP" control button.
- (2) "Standby/ride height memory" control button.
- (3) "Return to ride height" control button.
- (4) "Raise" control button.
- (5) "Lower" control button.
- (6) "Memory store/recall" control button.

Using the remote control box

Activate the electronic boxes or the master switch.

Switch on the ignition (if the air pressure is inadequate, start the engine).

"Raise" function

To raise the suspension, press control button (4). When the suspension has reached its upper stop, the system no longer takes account of the control (4). Pressing and holding control button (4) raises the suspension continuously.

"Lower" function

To lower the suspension, press control button (5). When the suspension has reached its lower stop, the system no longer takes account of control button (5). Pressing and holding control button (5) lowers the suspension continuously.

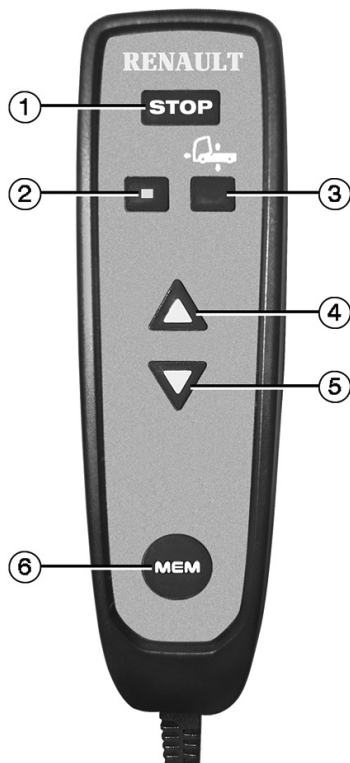
Memorize a loading bay level

To memorise a loading bay level, it must first have been set using control buttons (4) and (5).

Once the required height is reached, press button (6) for at least 5 seconds, then release it.

The required height is stored in memory.

To recall this height, simply press button (6) for at least 2 seconds, but less than 5 seconds.



Return to ride height

To recall the ride height, press control button (3).

Stop

"Stop" control (1) is used to interrupt the operation when the required height is reached.



In the event of danger, it is possible to stop all movement immediately by pressing control button (1).



If the electronic system estimates the speed of movement as too fast, it limits it by cutting the air flow.

Standby

Hold control button (2) down and switch off the ignition. During this phase, the chassis position may change.

The suspension position remains stabilized for 1 hour(s). The suspension height can also be adjusted by means of the raise/lower control button (4) - (5). The function remains operational for as long as there is sufficient air pressure inside the reservoirs.

Storing a ride height that is different to the factory default height

To store a new ride height, press and hold control button (2) throughout the operation.



During this phase, the chassis returns automatically to somewhere near the factory driving level.

Set the new height using controls (4) and (5). The maximum and minimum ride height adjustment values are limited by the electronic system. When these limits are reached, the system no longer takes account of control buttons (4) and (5).

Once the required height is reached, press control button (6) for at least 5 seconds, then release it.

Then release control button (2).

The required height is stored in memory.

To check that the new level has been taken into account, press control button (3).

Recalling the default ride height

Press control buttons (2) and (6) simultaneously for at least 2 seconds but less than 5 seconds.

First release control button (6) then release control button (2).

The default ride height is recalled.



If your vehicle has a gross combination weight (GCW) of 60 tonnes, the parking brake also operates on the front axle in addition to the drive axle.

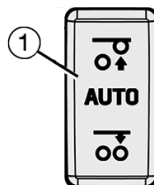
When adjusting the suspension, the front axle brake is released to avoid generating mechanical stresses.

Before operating the suspension, check to make sure that there is no risk of the vehicle moving.

Liftable axle

With switch (1) in the **"Auto"** position, if the load on the rear of the vehicle does not exceed 2/3 of the maximum load permitted by the drive axle; the axle lifts automatically when vehicle speed exceeds 5 km/h.

Press on the top of switch (1); the axle is lifted if its load permits.



Indicator pictogram (2) is displayed on the information display.

Press on the bottom of switch (1); the lift axle lowers.

When the vehicle is started up the load distribution between the drive axle and the axle is fixed.



Load distribution across the final drive axle and the rear axle

The load distribution function permits shedding of part of the load on the rear axle to transfer it to over the final drive axle by reducing the rear axle suspension air pressure to increase the pressure on the final drive axle (with a maximum increase to 30% above the load limit for each axle).

The transfer of the load improves vehicle driveability on low-grip surfaces or when approaching an area with slippery surfaces.

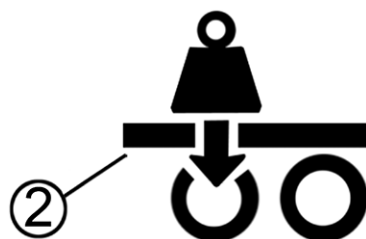
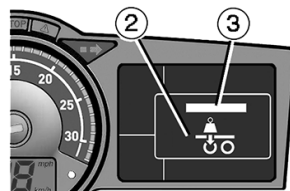
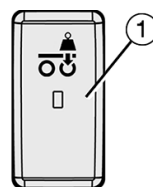
A first press on switch (1) optimizes vehicle traction. Warning pictogram (2) and an associated **"OPTIMUM GRIP"** message appear on the multifunction information display.

The load on the drive axle increases without exceeding its legal capacity.

Pressing switch (1) a second time puts a maximum load on the drive axle for extrication from difficult situations providing you are driving at less than 30 km/h. Warning pictogram (2) and an associated **"BOOGIE PRESS"** message appear on the multifunction information display.

The load on the drive axle increases to a maximum of 30% above its legal capacity.

Pressing switch (1) a third time restores standard load balancing (fixed load distribution between the drive axle and the axle). Indicator (2) and associated message disappear.



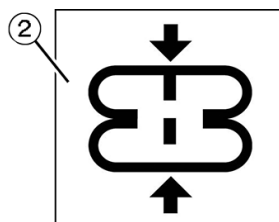
Test operation

Switch off and re-engage the master switch (10 seconds interruption).

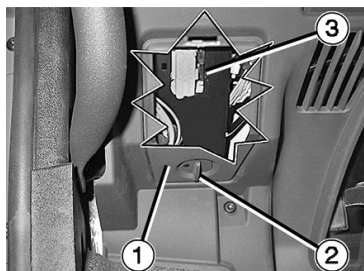
If warning pictogram (2) is displayed again with the message **"SWITCH OFF IGNITION"** and the **"SERVICE"** indicator, contact the nearest RENAULT TRUCKS garage.

Drive at a low speed (20 km/h maximum) and take extra care, maintaining safety distances.

If warning pictogram (2) goes out, the minor fault is deleted. Nevertheless, contact your RENAULT TRUCKS garage.



Fault finding and maintenance are to be carried out using the RENAULT TRUCKS test tool plugged into diagnostic socket (3).



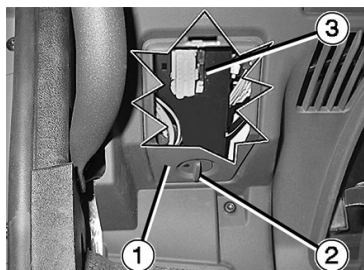
Diagnostic and Infomax "OBD" socket

"OBD" diagnostic socket (3) is positioned under the switches, to the left of the instrument panel.

To access "OBD" diagnostic socket (3), open cover (1) by turning catch (2) through $\frac{1}{4}$ of a turn.

Depending on your vehicle's equipment

"OBD" diagnostic socket (3) is also used as the Infomax connection.



Power take-off

The power take-off is usually a hydraulic pump driven by the engine or gearbox. The power take-off is mounted on the engine, the flywheel or the gearbox. A power take-off connected to the flywheel or engine is called a clutch-independent power take-off. The body builder adapts normal control of the power take-off for your particular equipment.

There are two possible applications (when stationary and when driving).

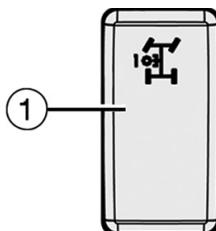
Use when stationary

Engagement

Power take-off engagement occurs at an engine speed below 1,000 rpm.

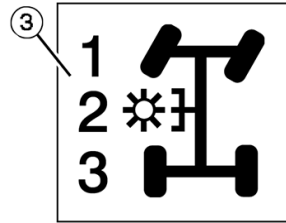
- Vehicle stationary;
- engine at idle speed;
- Gearbox in neutral;
- Parking brake activated.

Press and hold the switch (1).



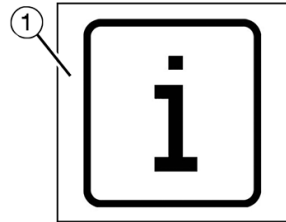
When pictogram (3) and its associated message appear on the multifunction information display, release the switch.

From this point, the power take-off is engaged.



Missing condition(s)

The appearance of the warning light (1) and its associated message on the multifunction information display tell you that there is a condition missing for the engagement of the power take-off.



The icon (3) will disappear, replaced by (4). It reports on the power take-off(s) engaged and their speed

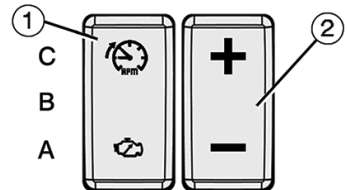


Engine speed adjustment

Once the power take-off speed has been selected, you can adjust the engine speed:

- move switch (1) to "A";
- adjust the speed using switch (2).

Or you can use the accelerator pedal.



Use when driving



Function to be activated at the dealership or by the bodybuilder using the RENAULT TRUCKS bodybuilder test tool.

The power take-off is engaged while the vehicle is stationary.

See previous pages.

- With the vehicle stationary, engage a gear ratio appropriate for use.
- Depress the accelerator pedal to start the vehicle: the power take-off begins to rotate.

Depress the accelerator pedal to start the vehicle: the power take-off begins to rotate.



It is not possible to shift gear.



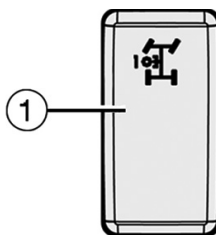
When using a power take-off while driving, the cruise control function will be deactivated for safety reasons. The accelerator pedal can be used to alter the engine speed.

Power take-off disengagement

Always remember to disengage the power take-off before switching off your engine.

The power take-off is disengaged by:

one press on the switch (1);returning the gearbox to neutral (ring (2) on "N");ignition switched off;engine stalling.



If your vehicle is fitted with these, only perform emergency stops when absolutely necessary. A forced stop can damage mechanical parts which can lead to serious faults or even accidents.



Some power take-off engagement/disengagement and engine speed regulation conditions can be modified using the RENAULT TRUCKS body builder software.



Do not exceed the engine speeds stipulated for the engagement and use of driven equipment while the power take-off is in operation



Ensure that the equipment installed on the vehicle is no longer in the operating position and poses no risk to users or people nearby.

Speed of rotation

For "RCV" vehicles (refuse collection vehicle) with automatic gearbox, the power take-off is controlled by the tipper function. Pictogram (3) appears on the multifunction information display when the power take-off is engaged.

If driving a hydraulic pump, do not exceed the speed of rotation stipulated by the equipment manufacturer.

The minimum engine speed is limited to 600 rpm, the maximum engine speed limited to 1,500 rpm and the rated engine speed set at 1,000 rpm ex works with the fast idling device activated.

See chapter **Driving**.

The speeds of rotation are provided as a guideline and are subject to modification without prior warning.

Depending on the equipment installed by the equipment manufacturer, the engine speed and some engagement conditions can be modified using the RENAULT TRUCKS bodybuilder test tool.

Hours counter

Hour meter (1) indicates the engine operating time.



1 hour of operation = 50 km

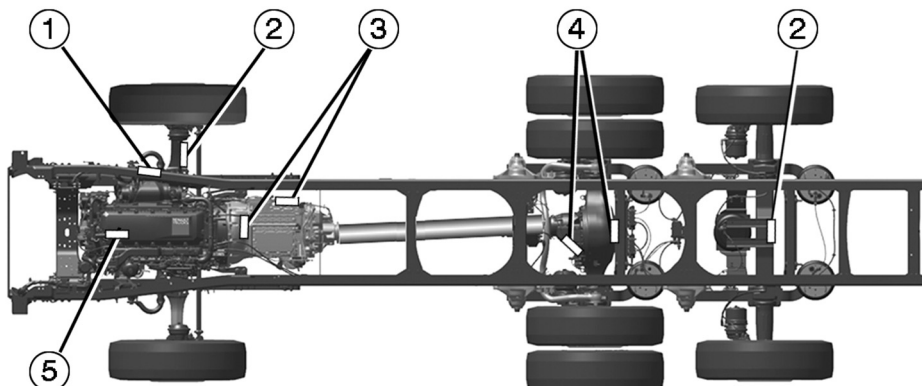




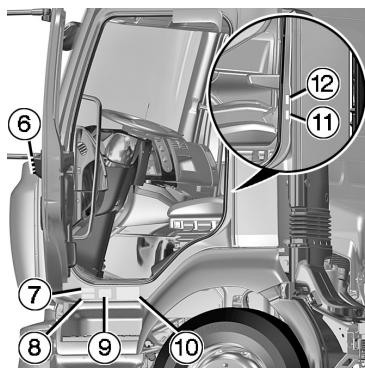
Servicing and maintenance

Vehicle identification

Identification plates are attached to the main parts of your vehicle.



- (1) - Chassis
- (2) - Axle
- (3) - Gearbox
- (4) - Drive axle(s)
- (5) - Engine
- (6) - CAM reference sticker
 - Paint code
 - Manufacturing number
- (7) - RTMD-ADR plate
- (8) - ABS plate
- (9) - Conformity plate
- (10) - Manufacturer's plate
- (11) - Tachograph sticker
- (12) - Speed limitation sticker



Day-to-day maintenance

Some simple maintenance jobs can be performed by the driver. If a lamp has failed, this may even be essential for legal and safety reasons.

Sometimes, it is necessary to replace a bulb to make sure that you can see and be seen on the road. When working with lamps, be careful to avoid any risk of injury, and to preserve the material quality.

Always replace a bulb with an identical bulb.

Bulbs

If replacing a bulb, always replace it with a bulb of the same rating and type.

Depending on your vehicle's equipment

Table of bulbs

Assignment	Power
Front parking lights	5W
Side parking lights	3W
Rear parking lights	2x5W
Front direction indicator lights	21W
Side flashing lights	21W
Rear direction indicator lights	21W
Halogen dipped beam headlights	70W
Daytime headlamps/Driving headlamps	20 / 60W
Outline lights	5W
Registration plate light	10W
Stop lights	21W
Fog light(s)	21W
Reversing light(s)	21W
Foot board lighting	5W
Cab overhead lights	21W
Reading light	10W

Work lamps (tractor)	21W
Work lamps (tractor)	70W

Changing a bulb

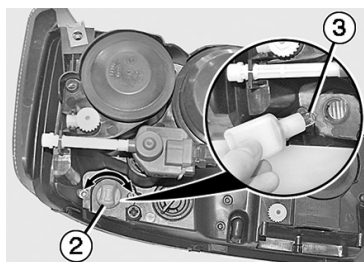
To access the bulbs, unscrew screw (1) and tilt the headlamp unit assembly outwards.



Front parking lights

Turn socket (2) anticlockwise as far as the stop, then pull it out.

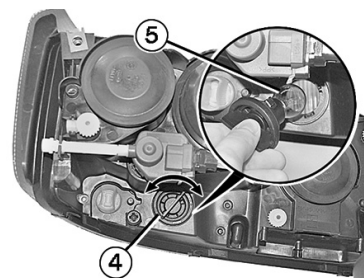
Replace bulb (3).



Front direction indicator lights

Turn socket (4) anticlockwise as far as the stop, then pull it out.

Replace bulb (5).

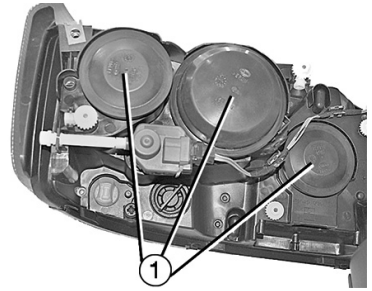


Headlights

Remove rubber blanking plugs (1).



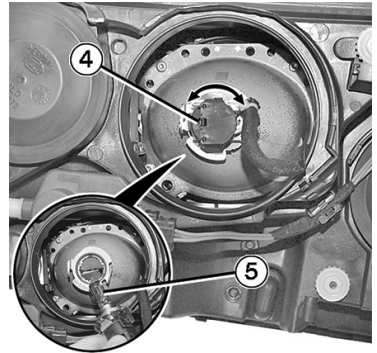
When changing a bulb, carefully replace the blanking plate in order to provide a perfect seal for the lamp.



Dipped beam headlights

Turn socket (4) anticlockwise as far as the stop, then pull it out.

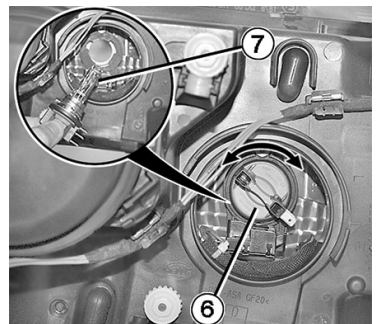
Replace bulb (5).



Daytime headlamps and "DRL"

Turn socket (6) anticlockwise as far as the stop, then pull it out.

Replace bulb (7).



Halogen bulbs

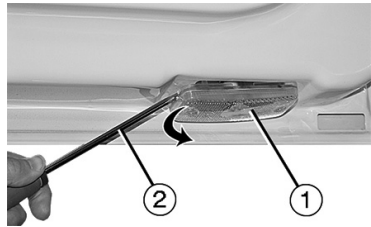


When installing these bulbs, it is recommended to hold them by their metal end. If they must be held by the glass section, use a cloth or clean paper. The lightest fingerprint or trace of grease could render the bulb unusable when the light is switched on. Before installation, you can clean the bulb using rubbing alcohol if you are not certain that it is clean. Before removing a bulb, leave it to cool for a few minutes if it has been lit, otherwise there is a risk of serious burns.

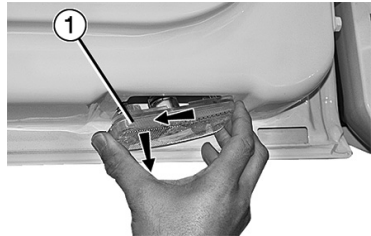


Courtesy lighting (foot board)

Unclip light (1) using a flat screwdriver (2).



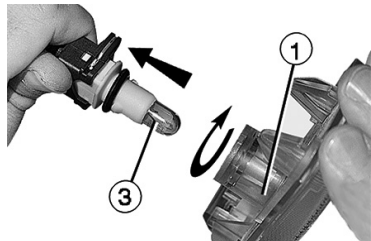
Remove light (1) from the door.



Turn bulb holder anticlockwise as far as the stop, then pull it out from light (1).

Replace bulb (3).

Clip light (1) back in.

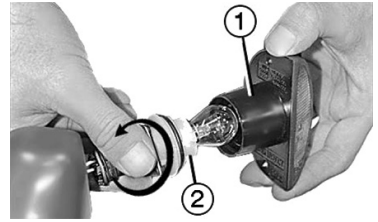


Replacing a bulb on the side indicator lights

Unscrew anchorage screws and release light (1).

Turn connector/bulb holder assembly (2) through one quarter of a turn and extract the bulb.

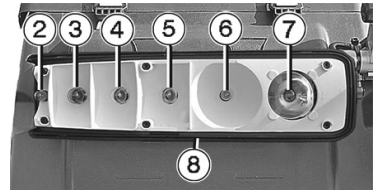
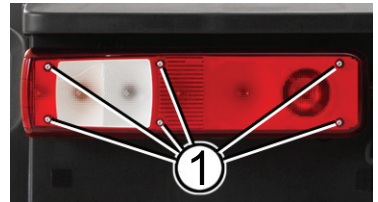
Replace the bulb and refit in the reverse order of removal.



Replacing rear light bulb(s)

Unscrew screw (1) and extract the diffuser to access the bulbs.

- (2) - Side light
- (3) - Direction indicator
- (4) - Reversing light
- (5) - Side light
- (6) - Stop light
- (7) - Fog light
- (8) - Registration plate lighting



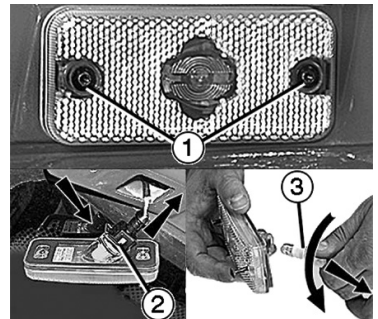
Replacing side light bulb(s)

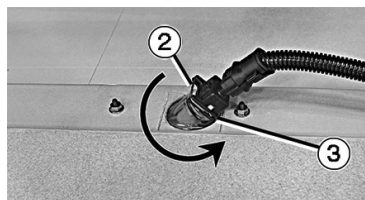
Remove anchorage screws (1) and release light.

Unclip connector (2).

Turn bulb-holder through 1/4 of a turn and remove (3).

Replace the bulb and refit in the reverse order of removal.

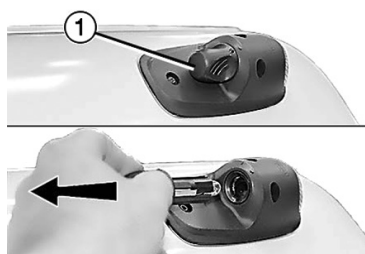




Changing bulb(s) on end-outline marker lamps on the roof

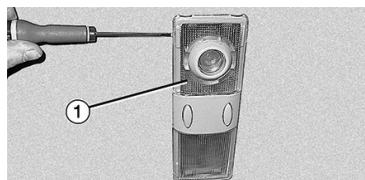
Turn bulb-holder through 1/4 of a turn and remove (1).

Replace the bulb and refit in the reverse order of removal.



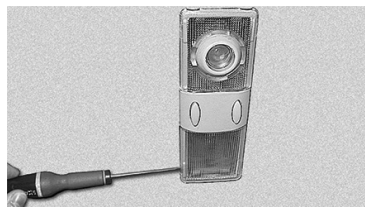
Replacing a reading lamp bulb

Unclip cover glass (1) using a flat screwdriver to access the bulb.



Replacing an overhead light bulb

Unclip the cover glass concerned using a flat screwdriver to access the bulb.

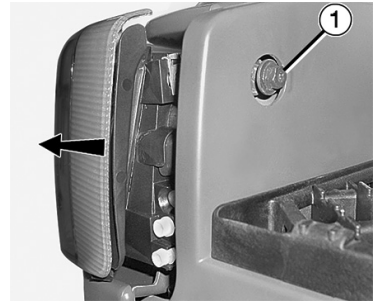


Use the dipped beam headlights in accordance with the applicable highway code

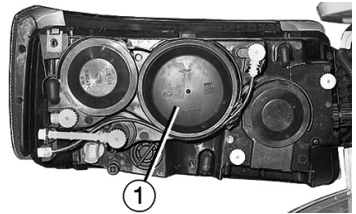
When you drive in a country where traffic drives on the opposite side of the road compared to your country, your asymmetric dipped beam lights can dazzle drivers coming towards you.

In order to avoid this, the headlamp is fitted with a system for modifying the light beam emitted.

To access the settings, unscrew screws (1) and pull on the headlamp insert.



Remove blanking piece (1).

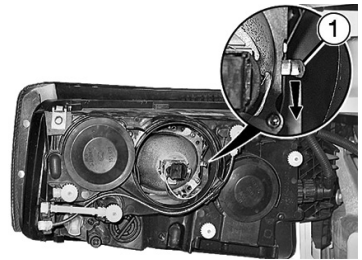


Manoeuvre lever (1) to modify the beam emitted.



There is a risk of burns when working on a headlamp that has just been in operation.

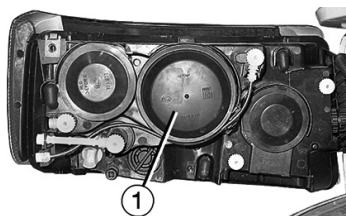
Use suitable protective equipment.



Do not forget to move lever (1) back to its original position when you leave the country.



When carrying out work on the headlamp which required removal of blanking piece (1), refit it carefully to ensure that the headlamp unit is sealed perfectly.



It is strictly prohibited to apply adhesive tape to the headlamp as this could quickly become damaged under the effects of heat.

Fuses

To gain access to the fuses:

- Turn the two locks (2) through $\frac{1}{4}$ of a turn.
- Remove the cover (1).

After the operation, refit cover (1) and turn locks (2) through $\frac{1}{4}$ of a turn.



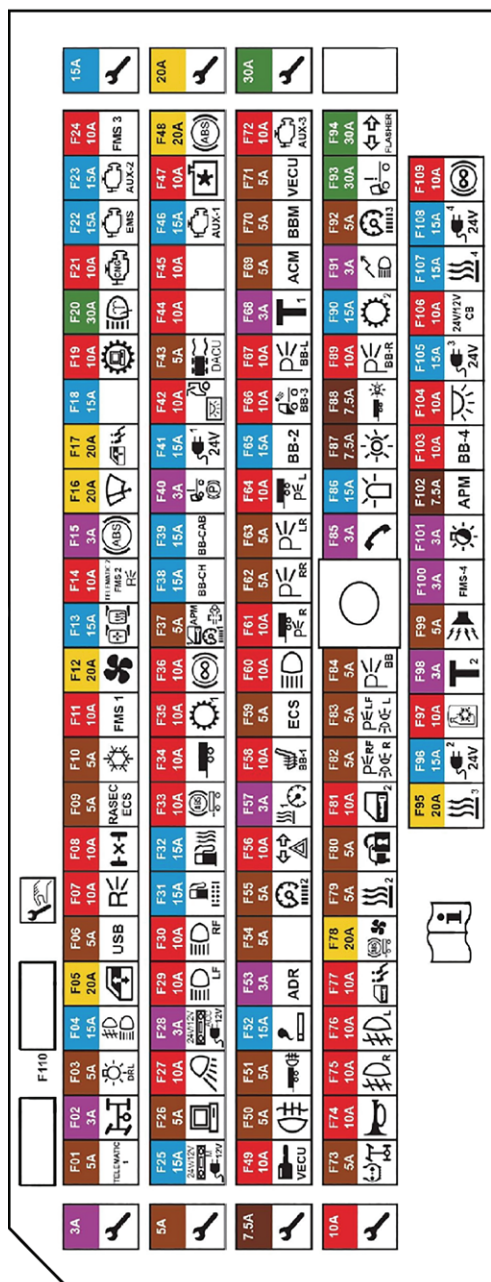
Replace the fuses using fuse grip (3).



Always replace a fuse with another fuse of the same rating.

Depending on your vehicle's equipment

Fuse panel on electrical distribution box



Day-to-day maintenance

Assignment	(F) Marks	Amperage
Telematics	F01	5
Power take-off	F02	3
Daytime running lights (DRL)	F03	5
Fog driving lights	F04	15
Long range headlights	F04	15
Front window lift motors	F05	20
Not used	F06	20
Reversing light(s)	F07	10
Differential lock	F08	10
Suspension ECU	F09	5
Electronic steering axle ECU	F09	5
Air conditioning	F10	5
Onboard management	F11	10
Air heater (ventilation)	F12	20
Swivelling defrosting rear-view mirrors	F13	15
Telematics	F14	10
Onboard management		
Reversing light(s)		
Reversing buzzer		
"EBS" ECU	F15	3
Windscreen wiper motor	F16	20
Not used	F17	20
Rear window lift motor (4-door cab)		
Not used	F18	15

Assignment	(F) Marks	Amperage
Automatic gearbox diagnostic socket	F19	10
Headlamp washer pump	F20	30
Not used	F21	10
Engine management ECU	F22	15
Actuator on variable geometry turbo	F23	15
Onboard management	F24	10
Radio	F25	15
12V socket		
24V/12V step-down transformer in dashboard		
Diagnostic socket (OBD)	F26	5
Work light	F27	10
Radio	F28	3
Accessories		
12V socket		
24V/12V step-down transformer in dashboard		
Telematics		
Main beam headlight, LH	F29	10
Main beam headlight, RH	F30	10
Fuel primary filter heater	F31	15
Fuel heater	F32	20
Trailer "ABS/EBS" socket	F33	10
Trailer socket	F34	10
Gearbox	F35	10
Retarder	F36	10

Assignment	(F) Marks	Amperage
Transponder	F37	5
Information display		
Central air management (ancillaries, service, etc.)		
Alarm		
Central locking		
Particulate filter regeneration control (Euro VI)		
Customer pre-arrangements on chassis	F38	15
Customer pre-arrangements on cab	F39	15
Cab tilting	F40	3
Bodybuilder information (parking brake engaged)		
24V socket on overhead ledge	F41	15
Roof hatch	F42	10
"DACU": Driving assistance control unit	F43	5
Not used	F44	10
Not used	F45	10
"EGR" solenoid valve	F46	15
Selector for manual gearbox		
Engine fan	F47	10
"EBS" ECU	F48	20
Key switch	F49	10
Transponder		
Vehicle control unit "VECU"		
Fog light(s)	F50	5
Trailer fog light(s)	F51	5

Assignment	(F) Marks	Amperage
Cigarette lighter	F52	15
ADR supply (alternator and master switch)	F53	3
Not used	F54	5
Information display	F55	5
Flasher unit	F56	10
Hazard signal control		
Hours counter	F57	3
Independent heating		
Heated seat	F58	10
Seat belt not fastened warning		
Bodybuilder pre-arrangement (engine running)		
Suspension ECU	F59	5
Additional main beam headlights	F60	10
Trailer RH parking lights	F61	10
RH rear parking lights	F62	5
LH rear parking lights	F63	5
Trailer LH parking lights	F64	10
Customer pre-arrangements	F65	15
Bodybuilder pre-arrangements (van lighting, machine control)	F66	10
Bodybuilder pre-arrangement (LH marker lights)	F67	10
Tachograph	F68	3
Pollution control management control unit	F69	5
Bodybuilder unit power supply (BBM)	F70	5
Vehicle control unit "VECU"	F71	5

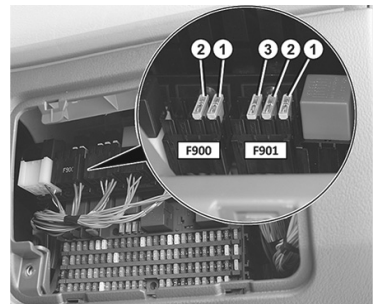
Day-to-day maintenance

Assignment	(F) Marks	Amperage
Engine preheating	F72	10
Tyre pressure check	F73	5
Electronic steering axle ECU		
Warning buzzer	F74	10
Fog driving light, RH	F75	10
Fog driving light, LH	F76	10
Not used	F77	10
Rear door central locking (4-door cab)		
Trailer "ABS/EBS" socket	F78	20
Parking heater control	F79	5
Central locking	F80	5
Central door locking	F81	10
RH front parking lights	F82	5
LH front parking lights	F83	5
Bodybuilder pre-arrangement (marker lights)	F84	5
Telephone	F85	3
Rotating beacons	F86	15
Stop lights	F87	7.5
Trailer stop lights	F88	7.5
Bodybuilder pre-arrangement (RH marker lights)	F89	10
Gearbox computer	F90	15
Lights lighting control	F91	3
Information display	F92	5
Cab tilting	F93	30

Assignment	(F) Marks	Amperage
Flasher unit	F94	30
Independent heating	F95	20
24 V sockets	F96	15
24V / 12V step-down transformer		
Refrigerator	F97	10
Tachograph (ADR)	F98	3
Alarm	F99	5
Onboard management	F100	3
"Dashboard" lighting rheostat	F101	3
Air production management (APM)	F102	7.5
Cab pre-arrangements	F103	10
Cab lighting	F104	10
24V socket on overhead ledge	F105	15
24V/12V step-down transformer in overhead ledge	F106	10
CB pre-arrangement		
Parking heater	F107	15
24V socket on dashboard	F108	15
Hydraulic retarder	F109	10

Fuses located above the fuse box

Always replace fuses with another fuse of the same rating.



Assignment	(F) Codes / (P) Positions	Amperage
Engine management ECU (+ permanent)	F900 / 1	15
Engine management ECU (+ permanent)	F900 / 2	15
Ignition control module (+ after ignition)	F901 / 1	15
Air volumetric flow sensor (+ after ignition)	F901 / 2	5
Engine management ECU (+ after ignition)	F901 / 3	5

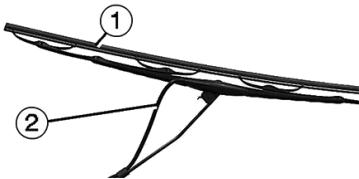
Front windscreen wiper blades

Replacing a windscreen wiper blade

Lift the windscreen wiper arm.

Remove windscreen wash pipe (2).

Tilt blade (1) until horizontal.

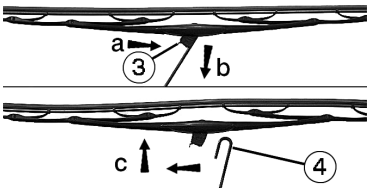


a - Pull on tab (2).

b - Pull blade (1).

c - Release hook (3).

To install, proceed in the reverse order to removal and ensure that tab (2) is secured.



Warranty

The maintenance instructions contain information on the preventive operations that the driver should perform to keep a vehicle reliable and safe.

However, the servicing described in these instructions does not cover everything.

Numerous points are included in the services provided by the RENAULT TRUCKS garages.

When purchasing a vehicle, a service programme is set up. The programme is based in particular on the type of wagon and its use in transport applications, the driving conditions, oil grades, environment and legislation in force in each country.

These are all unique factors for each vehicle. Therefore, we recommend that you contact the RENAULT TRUCKS network to optimise maintenance.

Usage depends on several criteria including the type of vehicle for the transport mission, vehicle use, environment, regulations, all creating a specific usage for each vehicle.

If the initial conditions necessary for setting up the servicing programme are modified, the programme should be corrected. Contact your RENAULT TRUCKS garage.

The high-pressure hoses must be replaced every 10 years by a RENAULT TRUCKS service point.

The tanks must be replaced every 20 years at a RENAULT TRUCKS service point.

Servicing is the prime guarantee

The tougher the operating conditions, the shorter the service and inspection intervals. In some cases, it is necessary to take account of hours of operation rather than mileage. The manufacturer cannot be held liable for incidents resulting from driving errors or failure to observe the instructions contained in this handbook, particularly if lubricants not meeting the performance level required are used for lubrication.

For all maintenance operations, consult a RENAULT TRUCKS garage.

Topping up engine oil



Top up the engine oil with RENAULT TRUCKS OIL RLD-3 grade oil until the first engine oil change is reached. Subsequently, the choice of oil to use is defined depending on your vehicle use.

The implementation of these operations is essential for the validity of the vehicle warranty.

To benefit from this, consult a RENAULT TRUCKS garage and give them the warranty certificate you received when the vehicle was delivered.

Lubrication

The manufacturer defines the lubricant performance level necessary for the smooth functioning of the vehicles he manufactures. The manufacturer also defines the frequency of the lubrication operations.

These recommendations must be strictly followed.

Observing them will increase the service life of the equipment and components. Failure to comply can invalidate the warranty offered.



Draining major units: always drain oil on level ground, with the oil hot to improve the flow.

When refitting drain plugs, fit new seals.

Checking the oil levels (all major units)

Oil levels must always be checked in identical conditions (vehicle unladen or laden), on flat ground, and at least 5 minutes after the vehicle has stopped.



Engine oil level: *for a more accurate reading, the engine oil level should be checked when the engine is cold, after a prolonged shut-down (2 hours minimum), in the morning, prior to start-up, for example; otherwise, check the oil level with the dipstick.*

- *Vehicle with mechanical suspension: check the level with the vehicle unladen.*

Vehicle road tests

After the warranty inspection, the vehicle manufacturer should make sure that the user clearly understands all the operating instructions in the handbook.

Preventive maintenance

In addition to the services provided by the RENAULT TRUCKS service points described in the maintenance programme, there are several daily operations which you must carry out.

Lubricants

RENAULT TRUCKS recommends the use of **ECO 5** lubricants (used as original equipment) to obtain saving in terms of fuel economy.

These recommendations meet the requirements of RENAULT TRUCKS to ensure the reliability expected by its customers.

These recommendations cannot be the subject of "**compromise or negotiation**": they are linked to the technical definition of the engines.

Non-compliance with the manufacturer's recommendations in terms of oil change intervals or the use of unsuitable lubricants will considerably reduce the operational safety factor of an engine and can cause serious incidents in the long term.

If such incidents were to occur, RENAULT TRUCKS would not accept the costs of repairing these engines, even for vehicles under warranty.

Adapt the viscosity of the oil used according to the climate conditions of the region where you use your vehicle.

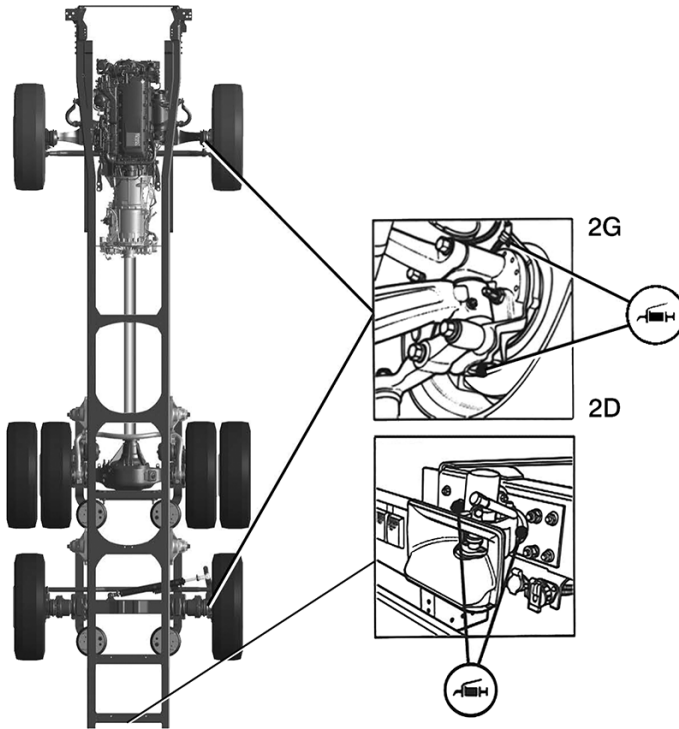
Using an oil of a lower grade will require more frequent oil changes. Your RENAULT TRUCKS garage is at your disposal to advise you.

We recommend Renault Trucks Oils.

Engine oil filter cartridge(s)

For the correct operation of your engine and to extend its service life, use only genuine filters with a filtration surface and threshold designed by the manufacturer.

Lubrication diagram(s)



Battery banks

Features - maintenance

Checking the charging status

The alternator cannot charge the battery to 100%; in optimal conditions, the battery can be charged up to 90%.

To maintain the batteries' lifespan, they must be charged externally at least once every three weeks, even if they appear to be fully charged.

For systems that use a lot of battery power when the engine is off, such as tailgate lifts, daily external charging is recommended.

- To avoid deep discharges and permanent battery changes, batteries must never be discharged with less than 50% capacity.
- Externally recharge the batteries regularly.
- Use chargers with charge indicators and sufficient charge currents.



Perform an external charge at least once every three weeks to maintain battery lifespan.



The battery levels must be checked every three months.

The electrolyte level must cover the plates.

For this operation, contact a RENAULT TRUCKS garage.



Battery electrolyte contains extremely corrosive sulphuric acid.

Remove any electrolyte coming into contact with the skin immediately. Wash with soap and plenty of water.

If any electrolyte is splashed into the eyes or comes into contact with a sensitive part of the body, seek medical advice.

Remember that the accumulator batteries discharge a lot of highly-explosive flammable gas. A short-circuit, a flame or spark near to a battery could cause a large explosion resulting in personal injury or damage to equipment.

Gas tank maintenance.



The gas tanks must be inspected every three years in an official centre.

Radiator insect screen

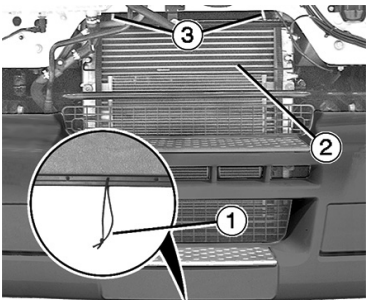
Disassembly

Pull string (1) located under the bumper downwards then slightly towards you to free insect screen (2) from its anchorage.

Cleaning

At the onset of spring and summer, clean the insect screen by blowing through compressed air, or with warm water.

Avoid high-pressure jets.



Assembly

Proceed in the reverse order of disassembly.

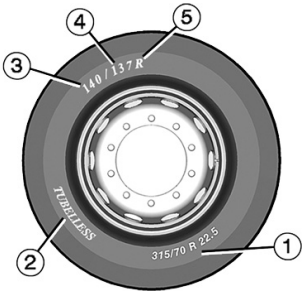
Ensure the insect screen is attached correctly.

Depending on vehicle use

Regularly check clogging of insect screen and radiator(s).

Tyre specifications

- 1. Tyre dimension
- 2. "Tubeless": no tube
- 3. Load rating: single wheel fitment
- 4. Load rating: twin wheel fitment
- 5. Symbol for tyre's maximum speed



Speed ratings

The following table may be used to find the speed rating symbol applicable to replacement tyres.

Vehicle speed	Symbol
≤ 80 km/h	F

Vehicle speed	Symbol
80 - 90 km/h	G
90 - 100 km/h	J
100 - 110 km/h	K
110 - 120 km/h	L
120 - 130 km/h	M



It is prohibited to install tyres with a speed rating lower than that of the tyres fitted as original equipment on the vehicle or those recommended by the manufacturer. However, it is indeed possible to install tyres with a higher speed rating.



For any modification to tyre type, it is essential to reconfigure the braking system. Contact your nearest RENAULT TRUCKS garage.

Have the tachograph calibrated by an approved S.I.M. workshop.

Tightening the wheels

Steel wheels

Tightening order

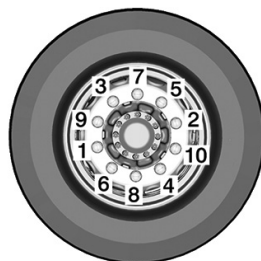
- Disc wheel rims

Wheel tightening torque(s):

650^{±75} Nm.

Use a 33 mm socket.

Wheel tightening control torque value: minimum 670^{±30} Nm.





Check the tightness of the wheel mounting nuts each time after refitting: after 20 to 30 km then between 150 and 250 km.

Check the tightness of the wheel mounting nuts every 6 months, whether the wheels have been removed or not.

If, when checking, it emerges that a nut is not tightened to the minimum torque of 670^{+30} Nm, loosen all the wheel mounting nuts and retighten them to the recommended torque and angle.

If these basic precautions are not heeded, there is a risk of the mounting nuts loosening and serious consequences may result.

Load and pressure rating of tyres



Whenever replacing tyres, ensure that the new tyre fitment has a load index that can support the maximum axle load of your vehicle.

Tyre dimension	Load rating	Load in kg according to fitment	
	Single / Twin	Single	Twin
315/80 R 22.5	156 / 150	8,000	13,400
	158 / 156	8,500	16,000

Inflation pressures



***Follow the tyre manufacturer's recommendations.** If none are available, use the following indicative pressures temporarily. For chassis intended to be equipped with equipment likely to alter the load per axle, refer to the manufacturer's data with relation to type, brand and application. Observe the load/speed ratings written on the tyre wall.*



Your vehicle is equipped with appropriate tyres. When changing fitment, ensure that the new fitment is compatible with your vehicle by contacting your RENAULT TRUCKS garage.

***Rims equipped with protective valve:** when removing/installing a tyre, follow the manufacturer's instructions. Make the operative aware of this.*

Tyre dimension	Load in kg according to fitment		Pressure in bar
	Single	Twin	
315/80 R 22.5	6,700	11,860	7.0
	7,140	12,640	7.5
	7,570	13,400	8.0
	8,000	-	8.5
	7,500	13,400	8.0**

** : depending on the load rating and speed symbol.

Helping Hand

Wheels/Tyres

Changing wheels

Precautions to take when fitting wheels to the vehicle:

Before fitting

Clean the wheel rims and hubs very carefully, in particular the contact surfaces (grease, earth, mud, metal swarf, overspray, etc.).

When installing

Oil the shafts and nuts lightly (engine oil). Tighten the nuts progressively using the tool provided with the vehicle. Pull on the arm of the tool to tighten correctly.



Over-tightening could result in damage. In order to avoid exceeding the tightening torque, do not use articles such as: pipes, extension bars, etc.

After installation

Check the tightness of the mounting nuts each time after refitting: after 20 to 30 km then between 150 and 250 km.

If these basic precautions are not heeded, there is a risk of the mounting nuts loosening and serious consequences may result.

Main causes of premature wear of tyres

- driving behaviour (excessive braking, driving over pot holes, etc.);
- vehicle overloading or incorrect distribution of load;
- over-inflation or under-inflation (inflate to the correct pressure for the weight per axle);
- incorrect twin fitment (always twin tyres of the same dimension, same type and same degree of wear);
- incorrect adjustment of the front axle geometry.

Inflation pressure test

Frequency

Tyre pressures must be checked on each refuelling or every fortnight.

Method

Tyre pressures should always be checked on cold tyres.

You must never deflate hot tyres.

Safety

In-service incidents.

Whenever an impact occurs, or whenever you cannot stop quickly following a tyre puncture, it is essential to have the tyre checked promptly by a specialist.



Over-inflation or under-inflation has an impact on fuel consumption.

Light alloy wheel rims

Instructions for installing wheels:

To make it easier to remove the wheel at a later point, grease the hub centring area with a copper-free grease such as "FREYLUBE, ROCOL. MG or ESSO MOBY".



Only use RENAULT TRUCKS nickelled or chromed valves. When replacing a valve, grease the valve hole and the rim inner seat with grease such as FREYLUBE or ROCOL. MG or ESSO MOBY".

Snow chains

In some countries, the use of snow chains may differ due to the legislation in force. Comply with the legislation in force in each country.

Snow chains must be installed on driven wheels. For certain types of chains, the tension must be rechecked after several tens of metres have been covered.

Do not exceed the maximum speed authorised for driving with snow chains.

As soon as the roadway is clear, remove the snow chains to avoid damaging the tyres and also to regain optimal braking behaviour and roadholding.



*If you encounter traction problems when driving with snow chains, deactivate the wheel anti-spin regulation ("ASR"); refer to the **Driving on difficult terrain** chapter.*



Use only snow chains approved and recommended by RENAULT TRUCKS in order to prevent damage to the vehicle. Contact your RENAULT TRUCKS garage.

Washing, general information

Regular cleaning helps retain the value of your vehicle. Don't forget to wash your vehicle more often in wintry conditions or after driving in a dirty environment.

The dirty water from cleaning the vehicle contains chemicals and pollutants that might harm the environment. It is recommended to use environmentally-friendly detergents and to clean the vehicle in a facility where dirty water is collected.



Be very careful when cleaning transmission components such as axles, the gearbox, motors and electrical connections.

We strongly advise against washing these components with water. If you must do so, do not get the breather pipe, openings and electrical connections wet.

Washing the bodywork

To keep your bodywork in good condition for longer and maintain the lustre of its paintwork, it is recommended to wash your vehicle regularly. Especially in winter when road salt and wet weather can cause corrosion.

The use of brushes is not recommended, in particular during the first month of use of the vehicle. Avoid using high temperature steam cleaning.

Neutral detergents are available commercially which will not affect the paintwork.

To remove greasy marks, use benzine (not vehicle petroleum).

If the aluminium components are heavily soiled, clean them in water with added non-alkaline cleaning product then rinse in fresh water.

Stop the engine and switch off the master switch before washing the vehicle.

After washing, carry out general greasing of the vehicle.

Front end

When the radiator grille is up, avoid any pressurized water splashes.

On the chassis

When washing the chassis, be particularly careful when using high-pressure jet washers.

To limit any risk of a fault, avoid stress and strain on:

- electronic or electrical modules and electrical devices;
- heater air intakes, engine intake and air filter,

- pneumatic devices,
- absorbent panels and sound-proofing screens.
- component breathers (gearbox, final drive axle, etc.),
- universal joints,
- seals of sliding sections,
- hinge pins,
- pneumatic equipment.

High pressure cleaner

High pressure cleaners can cause damage to your vehicle. Always be very careful when using them, especially on joints, plastics, rubbers, connectors and paint.

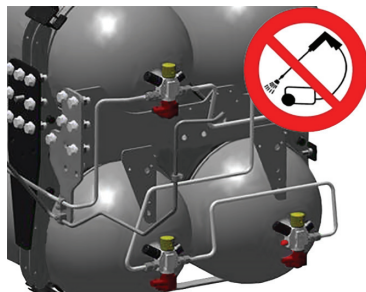
Be careful when pressure washing the axles, seals and other moving parts, otherwise water and dirt could penetrate.

Avoid removing lubricating grease when rinsing. If this should happen, grease the vehicle components.



Limit the jet washer pressure to a maximum of 80 bar. For sound-proofing screens, limit the temperature to 50°C and maintain a minimum distance of 100 mm.

Take care to avoid high pressure cleaners around the valves to avoid damaging them.



When washing the vehicle, carry out general greasing.

Roller washers

Before activating automatic washing, fold the front-view mirror onto the windscreen and fold the side rear-view mirrors so that they are not damaged.



For the side rear-view mirrors, swivel kerb view mirror (1) to fold rear-view mirror arm (2) fully.

Once washing is complete, unfold the front-view mirror and the side rear-view mirrors.



Steel wheel rims, care

Steel wheel rims are often exposed to different types of contaminants, such as road dirt, oil, asphalt, tar and brake dust. Regular maintenance is required in order to protect the wheel rims from discolouration, corrosion and unnecessary wear. A protecting wax is used for additional protection, for example, when driving on salted roads, in slush or in coastal environments.

Damage to the wheel rim's paint must be remedied immediately to prevent corrosion.

Clean the wheel rims regularly. First rinse with water, preferably use high-pressure washing. Use a brush or sponge to clean the wheel rim.

For stubborn dirt, an alkaline cleaning agent ($\text{pH} > 7$) may be used.

Head lamp cleaning

The head lamps are equipped with plastic glass, use a soft cloth or cotton cloth.

If this is not sufficient, use a soft (or cotton) cloth dampened with soapy water.

Rinse with a damp soft or cotton cloth then wipe gently with a dry, soft cloth.

The use of any other product is prohibited.

Cleaning the passenger compartment

Spray with or wipe with a cloth soaked in cleaning product (soapy water).

All alcohol-based, petroleum-based and trichlorethylene products should be avoided. The use of such products would risk damaging the trim and other materials.

Lightly talc the door and window seals as well as the runners.

Cleaning the dashboard

Use only soapy water (the use of all other products is prohibited).

Cleaning the seats

Plastic components: use soapy water.

Fabric components: clean using degreasing product (turpentine spirit, stain remover, etc.).

Leather components: to soften the leather and maintain its brightness, use a damp cloth. Visit the RENAULT TRUCKS boutique for other products.

Your vehicle is equipped with a leather steering wheel, we recommend that you take care to:

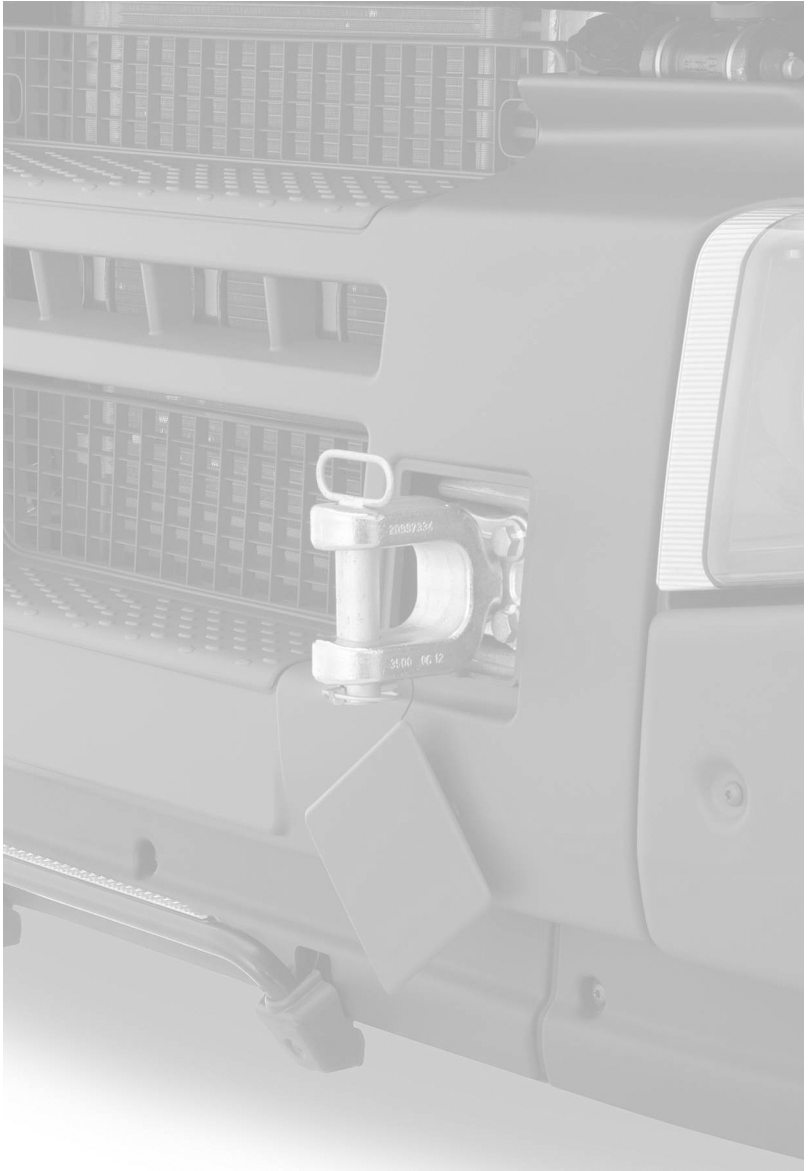
- Avoid contact with harsh materials (solvent, hydro-alcoholic gel, concrete, hydrocarbons, chemical products...).
- Avoid contact with water.

Leather is an organic material. Take care of it to avoid deterioration.

- Regularly clean the steering wheel with a specialized product.
- Condition the leather with a leather maintenance product recommended by RENAULT TRUCKS.
- Remove excess product with a dry cloth.



All alcohol-based, petroleum-based or trichlorethylene products should be avoided. The use of such products would risk damaging the trim and other materials.



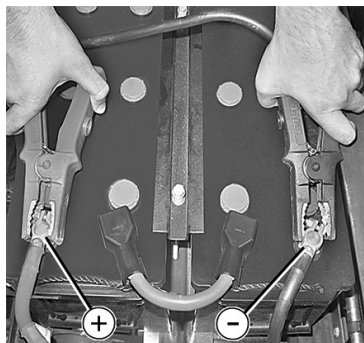
Breakdowns - quick fixes

Starting the vehicle with external assistance

In the event of non-starting using the vehicle accumulator batteries, an external current source can be used (battery trolley or another vehicle).

Procedure:

- Switch off the master switch.
- Connect starter adapter to a battery trolley or to another vehicle using the extension piece provided.
- Engage the master switch.
- Actuate the starter.
- Keep the engine at an engine speed of **1,300 rpm** for approximately **5 minutes**.
- Switch on the dipped beam headlights before returning the engine to idle speed.
- Let the engine idle for 1 minute.
- Disconnect starter adapted from the battery trolley or the other vehicle.
- Switch off the headlights.



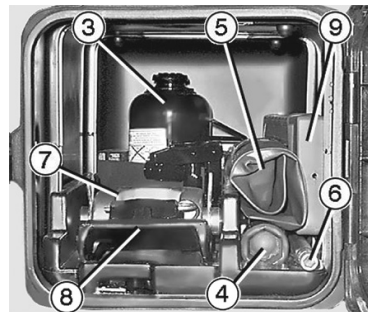
The use of a power charger to aid starting is forbidden (damage to electronic systems).

Location of the tool kit

Your tool kit will help you tackle small hitches along your way. In the event of a more serious problem, do not hesitate to call your nearest Renault Trucks service point.

Storing tools in the locker

- Jack (3)
- Wheel wrench (4)
- Tool kit (5)
- Cab lift control bar (6)
- Jack handle and wheel wrench (6)
- Towing yoke (7)
- Jack fitting (8)
- Warning triangle (9)



Using the jack

Raising your vehicle is a hazardous operation. If in doubt, contact the nearest Renault Trucks service point.

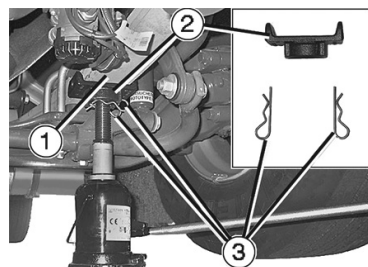
Front jacking points (1)

It is essential to use adapter (2), attaching it to the jack head using the two pins (3).

Position the jack as close as possible to the axle.



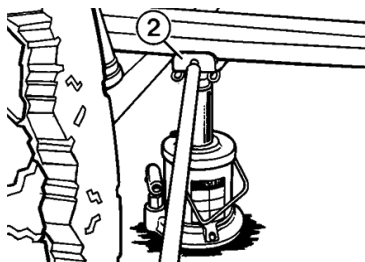
Air suspension: put the suspension in the low position.



STOP

- NEVER MOVE BELOW THE VEHICLE WHEN IT IS HELD UP ON A JACK!
- PLACE THE JACK ON A FIRM, HORIZONTAL SURFACE WITH GOOD ADHESION.
- FIRMLY CHOCK THE WHEELS THAT REMAIN ON THE GROUND.
- RELEASE THE BRAKES ON THE WHEEL TO BE REPLACED.

If necessary, use the jack bar to release adapter (2).



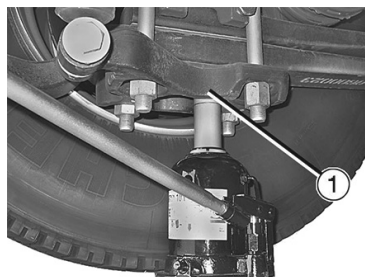
Rear jacking points (1)



Air suspension: put the suspension in the low position.



- NEVER MOVE BELOW THE VEHICLE WHEN IT IS HELD UP ON A JACK!
- PLACE THE JACK ON A FIRM, HORIZONTAL SURFACE WITH GOOD ADHESION.
- FIRMLY CHOCK THE WHEELS THAT REMAIN ON THE GROUND.
- RELEASE THE BRAKES ON THE WHEEL TO BE REPLACED.



Tightening the wheels

Refer to the maintenance operations section, see Tightening the wheels page 251.

Replacing a wheel

In the event of a puncture, you must use a spare wheel.

Be careful, there are certain risks involved in changing a wheel. Consult the chapter on changing a wheel or, if in doubt, call the nearest service point.

When you handle the spare wheel or the wheel to be changed, be careful and anticipate the risk of the wheel falling at each stage.

Stop the vehicle in a suitable place, without causing a traffic disruption, so that you can move around the vehicle without danger for yourself or others.

The ground must be flat and stable.

Stop the engine.

Activate the parking brake. Refer to the "Parking brake" chapter.

Switch on the hazard warning lights.

Switch off the ignition.

To locate the safety vest, warning triangle, hazard lamp and tool kit, refer to "Location of jack and tool kit" chapter.

Put on the safety vest before going to position the safety triangle and the hazard lamp at a sufficient distance away.

Chock the vehicle. Refer to the "Wheel chocks" chapter.

If necessary, unload part of the cargo to abide by the weight limit for the lifting equipment.

Place the jack under the vehicle below a jacking point. Use the recommended jacking points. Refer to the chapter "Use of the jack".

Vehicle fitted with pneumatic suspension: put the suspension in the low position, and clamp it there with a strap.

With the wheel still on the ground, loosen the wheel nuts without removing them.

Release the brakes on the wheel that is to be replaced, otherwise there is risk that the brake drums may become oval.



UNCONTROLLED LOWERING OF THE VEHICLE COULD RESULT IN SERIOUS MATERIAL DAMAGE, SERIOUS INJURY OR EVEN DEATH.

- NEVER MOVE BELOW THE VEHICLE WHEN IT IS HELD UP ON A JACK.
- PLACE THE JACK ON A FIRM, HORIZONTAL SURFACE WITH GOOD ADHESION.
- THE JACK MUST ONLY BE USED TO LIFT THE VEHICLE FOR A BRIEF TEMPORARY PERIOD.
- THE JACK MAY LOWER OR COLLAPSE IF THE VEHICLE IS SUPPORTED FOR TOO LONG OR IF THE VEHICLE MOVES.
- THE JACK MUST ONLY BE POSITIONED AT THE RECOMMENDED JACKING POINTS.
- ONLY USE THE TOOLS PROVIDED IN THE RENAULT TRUCKS TOOL KIT.
- NEVER START THE VEHICLE, MOVE THE BODY OR CLIMB ONTO OR INTO THE VEHICLE FOR AS LONG AS IT IS LIFTED.

Using the jack provided with the tool kit, lift the vehicle so that the wheel to be replaced, free from load, is no longer in contact with the ground.

Completely remove the wheel nuts, then pull the wheel off.



Be careful not to damage the threads of the wheel studs when removing/fitting the wheel.

STOP

BE AWARE OF THE RISK OF THE WHEEL FALLING OFF AND OF THE HINDRANCE IT COULD CAUSE ON THE CARRIAGEWAY.

STOP

FOR YOUR SAFETY AND THAT OF OTHERS, USE ONLY THE TOOLS AND WHEELS SUPPLIED BY RENAULT TRUCKS THAT ARE RECOMMENDED FOR YOUR VEHICLE.

Carefully position the new wheel, taking care not to damage the studs. Refer to the chapter "Tyre load index and pressures", section "wheel and tyre".

Tighten the wheel. Refer to the "Tightening of wheels" chapter.

Check the tyre pressures.

Before setting off again, remove the strap and put the suspension back into the driving position.

Tightening the wheels

Refer to the maintenance operations section, see Tightening the wheels page 251.

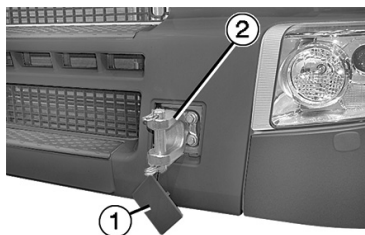
Towing

It is sometimes necessary to tow your vehicle. To avoid damage, pay close attention to the instructions in this manual.

If in doubt, call your Renault Trucks service point.

If your vehicle has to be towed, use the towing eye supplied with your vehicle's on-board tool kit.

Unclip blanking plug (1) and screw in eye (2).





Eye (2) mounted on the front cross member is designed for towing on the road under normal conditions.

Releasing a vehicle that is stuck with its drive wheels spinning in soft ground or mud puts a much more significant strain on the yoke.

In this case, use suitable lifting equipment.

If necessary, an observer on the ground will guide the manoeuvre, possibly using a radio transmitter.

Towing should be carried out with the engine running.

If the vehicle engine is faulty:

- Neutralise the brake cylinders manually if there is no air pressure.
- The steering is heavy because the power-assisted steering system is not operational.

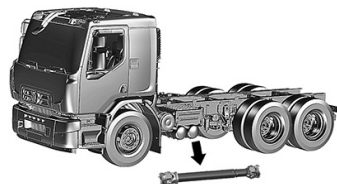


Chock the vehicle wheels.



To avoid damage to the gearbox, the drive shaft must be removed when towing with the drive wheels on the ground.

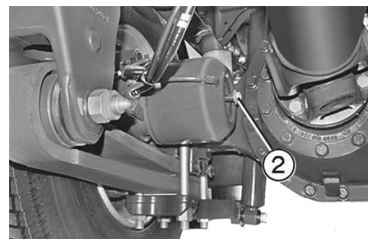
- Put the gearbox in neutral.
- Remove the transmission.
- Use the towing eye.



Chock the vehicle wheels.

Release the parking brake

In the event of accidental loss of pressure, proceed as follows to move the vehicle (towing): using a 24 mm wrench, unscrew bolt (2) on each brake cylinder until the road wheels are free.



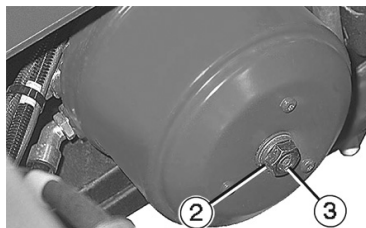
The protrusion length X of bolt (2) varies (15 mm or 65 mm) depending on the type of brake cylinder (1).



Depending on your vehicle's equipment



Chock the vehicle wheels.



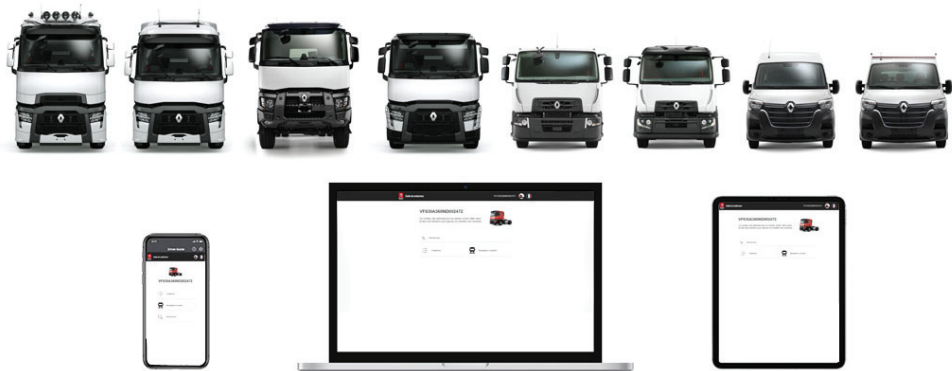
Release the parking brake

In the event of accidental loss of pressure, proceed as follows to move the vehicle (towing): using a 24 mm wrench, loosen bolt (2) on each brake cylinder in an anti-clockwise direction until the road wheels are free; the red mark should be exposed.

Depending on your vehicle's equipment

Recommissioning: pressurise the circuit with a pressure of approximately 5 bar. Offer up bolt (2) into contact with the cylinder and tighten it to a torque of 75 Nm or turn it clockwise and tighten it to a torque of 75 Nm; red marking (3) should be obscured.

Access to the Driver Guide



To use the Driver Guide:

- Go to:
<https://driverguide.renault-trucks.com/>
- or
- scan the QR code to find the driver guide app.
- or
- search for "...Renault Trucks Driver Guide" in your app download site.



You will find all the necessary information relevant to your specific Renault Trucks vehicle.

We reserve the right to make changes to this publication in the interests of constantly improving our output. The digital version will always contain the most up-to-date information.



"

"ASR" Anti-slip regulation system	186, 211
"EBS" system faults	189
"EBS" system	186
"ESC" system	187
"Rear drive axle(s)" inter-wheel differential lock	210

A

Accelerator	201
Activating the "Automatic neutral" function	204
Additional driving information	84
air conditioning	122
Air pressure indicator in braking circuit	158
Air suspension	214
Anti-lock braking system "ABS"	186
Audio (settings)	91
Audio settings	116
Automatic emergency braking system (AEBS)	181
Automatic gearbox	17, 193
Auxiliary	119

B

Battery banks	248
Before getting into the vehicle	152
Bluetooth®	119
Bulbs	229

C

Cab access	30
Cab overhead lights	102
Cab tilting	41
Calls with the Bluetooth® hands-free system	115
Checking the oil level with the gear selector	206
Child safety	131
Cleaning the dashboard	259
Cleaning the passenger compartment	259
Cleaning the seats	259
CNG engine	17
Cold weather start-ups	201
Combined lights and horn stalk switch	58
Coolant level	153
Cruise control	173

D

Dashboard	50
De-icing door mirrors	61
Diagnostic and Infomax "OBD" socket	222
Digital tachograph	78
Display brightness setting	90
Display messages	168
Display test	162
Doors	22
Double locking switches	58
Downshift and direction change inhibitor function	202

E		General operating instructions for commercial vehicles		6
Electric window controls	99	General		16
Electrically-controlled door mirrors	61	Geolocation		170
Electronic speed limiter	177	H		
Emergency brake assist	187	Head lamp cleaning		258
Engine idle adjustment device	168	Headlight adjustment		62
Engine oil level check	154	heating		122
Engine oil level gauge	156	Helping Hand		253
Engine start-up	165	Hours counter		225
Engine stop	205, 213	Hydraulic power-assisted steering		170
engine, operating curves	173	I		
Equipment (information display message)	92	identification plates		228
Equipment message	92	Ignition switch		162
Expert menu	92	In the event of an accident		133
Expert	92	In the event of fire or risk of fire		133
F		Information (display)		92
Fast idling device	168	Information display brightness		90
Fault(s) display	163	Information display, expert menu		92
Forward view mirror	62	Information display		92
Front windscreen wiper blades	244	Instrument panel		66
Fuel level indicator	157	K		
Fuses	236	Key to switches		52
G		Key to warning messages and tell-tales		76
Gas filter	152	Key to warning pictograms		68
Gas tank refuelling	32			
Gear selector	193			
General description	194			

Keys	22	O	
		Operating speed	172
		Optional equipment	18
L		P	
Label read mode	34	Parking brake	191
Lane departure warning system (LDWS)	177	Power and engine torque curve	173
Languages selected	90	Power take-off	222
Liftable axle	218	power	173
Living	98	Preventive safety measures	132
Load and pressure rating of tyres	252	Push-button gear selector	194
Load distribution across the final drive axle and the rear axle	218		
Location of radio peripherals	120	R	
Location of the jack and tool kit	263	Radiator insect screen	250
Locking the doors	22	Radio/information display remote control	108
Lubricants	247	radio	105
Lubrication diagram(s)	248	Radio	110, 111
		See also <i>switching on</i>	
M		Reduced display	90
Maintenance display	164	Reference guide for radio	105
Master switch	37	Remote control unit	215
Meaning of the logos shown on the labels	35	Replacing a wheel	264
Menus and submenus	87	Retarder	208
Mode ↓ / ↑	199	Reversing buzzer	186
MODE button	200	Roof ventilation hatch	100
Mode D	198	Running-in	140
Mode N	197	S	
Mode R	196	Safety equipment built into the vehicle	132
Multifunction information display	83	Screen wash level	156

Seat belts	130	Use at high altitudes	141
Seats	46	Use during summer or in hot countries	140
Serial numbers on the vehicle	228	Use during winter or in cold countries	140
Setting the time	89	Use in dusty environments	141
Shock sensor	142	Using the hydraulic retarder	203
Shut-off valves	142	Using the jack	263
Sound level adjustment	91	USPWT	264
Standard equipment	18		
Starting the vehicle with external assistance	262		
Starting with "electronic starter" function	166	V	
Statutory test display	162	Vehicle identification	228
Steel wheel rims, care	258	Vehicle overview	18
Steering fluid level	155	Vehicle with adjustable rear suspension	215
Steering wheel adjustment	63	Ventilation - heater	122
Stopping the vehicle	213	ventilation	122
Storage compartment(s)	100		
		W	
T		Warning messages	75
Tablet holder	103	Warnings	13
Telephone cradle	121	Warranty	245
Test operation	219	Washing the bodywork	256
Tightening the wheels	251	Welcome on board your RENAULT TRUCKS vehicle	6
Time (setting)	89	Windscreen access	30
torque	173	Windscreen wash/wipe control	60
Towing	266		
Turbocharger	141		
Tyre specifications	250		
Tyres	152		
U			
USB	117		



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**RENAULT
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50 000 000€

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